COUNTY GOVERNMENT OF WEST POKOT
P.O. BOX 222-30600
KAPENGURIA

TENDER NO. CGWP/EU/T/034/2020-2021
FOR
SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NASUKUTA ABATTOIR PROCESSING EQUIPMENT

TENDER SUBMISSION DEADLINE: 18TH MAY, 2021, AT 12:00 NOON

MAY, 2021
# Table of Contents

**SECTION I: INVITATION TO TENDER** .............................................................. 7  
FORM OF TENDER ........................................................................................................ 9  
FORM OF TENDER SECURITY FROM BANK .............................................................. 10  
FORM OF TENDER SECURITY FROM INSURANCE .................................................. 11  
**SECTION II: INSTRUCTIONS TO TENDERERS** .................................................. 12  
1. General/Eligibility/Qualifications/Joint venture/Cost of tendering .................................. 12  
2. Tender Documents .................................................................................................... 15  
3. Preparation of Tenders .............................................................................................. 15  
4. Submission of Tenders .............................................................................................. 18  
5. Tender opening and evaluation .................................................................................. 19  
6. Award of Contract .................................................................................................... 21  
7. Corrupt and Fraudulent Practices ............................................................................. 23  
**SECTION III: APPENDIX TO INSTRUCTIONS TO TENDERERS** ......................... 24  
**SECTION IV: TENDER EVALUATION CRITERIA** ................................................. 25  
STAGE 1 - PRELIMINARY EVALUATION ................................................................... 25  
STAGE 2 - TECHNICAL EVALUATION ....................................................................... 26  
Table 1: Scores for the Technical Evaluation .................................................................. 26  
STAGE 3 - FINANCIAL EVALUATION ....................................................................... 28  
STAGE 4 – DUE DILIGENCE & RECOMMENDATION FOR AWARD ......................... 28  
**SECTION V: CONDITIONS OF CONTRACT** ......................................................... 29  
1. Definitions .................................................................................................................. 29  
2. Interpretation ............................................................................................................. 31  
3. Language and Law ..................................................................................................... 32  
4. Project Manager’s Decisions .................................................................................... 32  
5. Delegation ................................................................................................................. 32  
6. Communications ....................................................................................................... 32  
7. Subcontracting ......................................................................................................... 32  
8. Other Contractors .................................................................................................... 32  
9. Personnel .................................................................................................................. 32  
10. Works ...................................................................................................................... 33  
11. Safety and Temporary Works ................................................................................ 33  
12. Discoveries ............................................................................................................. 33  
13. Work Program ........................................................................................................ 33  
14. Possession of Site .................................................................................................... 34  
15. Access to Site ......................................................................................................... 34  
16. Instructions ............................................................................................................. 34  
17. Extension or Acceleration of Completion Date ....................................................... 34  
18. Management Meetings ......................................................................................... 34  
19. Early Warning ....................................................................................................... 34  
20. Defects ................................................................................................................... 35  
22. Variations ............................................................................................................... 35  

March, 2021
Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir

1.26 Structural Provision for the Works.................................................................57
1.27 Position of Services, Plant, Equipment, Fittings and Apparatus ........................57
1.28 Checking of Work............................................................................................57
1.29 Setting to Work and Regulating System .........................................................57
1.30 Identification of Plant Components..................................................................58
1.31 Contract Drawings ...........................................................................................59
1.32 Working drawings............................................................................................59
1.33 Record Drawings (As Installed) and Instructions ............................................60
1.34 Maintenance Manual.........................................................................................62
1.35 Hand-over.........................................................................................................62
1.36 Painting ............................................................................................................63
1.37 Spares..............................................................................................................63
1.38 Testing and Inspection – Manufactured Plant....................................................63
1.39 Testing and Inspection - Installation .................................................................63
1.40 Labour Camps..................................................................................................63
1.41 Storage of Materials.......................................................................................64
1.42 Initial Maintenance .........................................................................................64
1.43 Maintenance and Servicing After Completion of the Initial Maintenance .........64
1.44 Trade Names.....................................................................................................65
1.45 Water and Electricity for the Works.................................................................65
1.46 Protection.........................................................................................................65
1.47 Defects after Completion .................................................................................65
1.48 Damages for Delay..........................................................................................65
1.49 Clear Away on Completion ............................................................................65
1.50 Final Account....................................................................................................65
1.51 Fair Wages .......................................................................................................66
1.52 Supervision.......................................................................................................66
1.53 Test Certificates ...............................................................................................66
1.54 Labour..............................................................................................................66
1.55 Discount to the Main Contractor .....................................................................66
1.56 Guarantee .........................................................................................................66
1.57 Direct Contracts...............................................................................................67
1.58 Attendance Upon the Tradesmen etc...............................................................67
1.59 Trade Unions....................................................................................................67
1.60 Local and other Authorities notices and fees..................................................67
1.61 Assignment or subletting..................................................................................67
1.62 Partial Completion ...........................................................................................67
1.63 Temporary Works............................................................................................67
1.64 Patent Rights ..................................................................................................68
1.65 Mobilization and Demobilization ...................................................................68
1.66 Extended Preliminaries ...................................................................................68
1.67 Supervision by Engineer and Site Meetings.....................................................70
1.68 Amendment to Scope of Contract Works.........................................................70

March, 2021

Page 4 of 192
Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir

1.69 Contractor Obligation and Employers Obligation ......................................................... 70

SECTION VIII - APPENDIX TO CONTRACT PRELIMINARIES AND GENERAL .................. 71

CONDITIONS ......................................................................................................................... 71

SECTION IX: SPECIFICATIONS .......................................................................................... 72

PART A – GENERAL MECHANICAL SPECIFICATIONS ......................................................... 72

1.01 General ......................................................................................................................... 72

1.02 Quality of Materials .................................................................................................... 72

1.03 Regulations and Standards .......................................................................................... 72

1.04 Electrical Requirements .............................................................................................. 73

1.05 Transport and Storage ................................................................................................. 73

1.06 Site Supervision .......................................................................................................... 74

1.07 Installation ................................................................................................................... 74

1.08 Testing .......................................................................................................................... 74

1.09 Colour Coding............................................................................................................. 75

1.10 Welding ........................................................................................................................ 75

PART B - GENERAL TECHNICAL SPECIFICATION .......................................................... 77

GENERAL ............................................................................................................................. 77

PART C – PARTICULAR TECHNICAL SPECIFICATION FOR CATEGORY A ABATTOIR PROCESS

EQUIPMENT .......................................................................................................................... 81

1. CATTLE LINE ................................................................................................................. 81

2. SHEEP/GOAT DRESSING EQUIPMENT ........................................................................ 103

3.0 CHILLER AND LOAD OUT AREA .............................................................................. 112

4.0 HEAD, FOOT & HORN EQUIPMENT ....................................................................... 113

6.0 PAUNCH EXTRACTION AND TRIPES CLEANING ROOM ..................................... 116

7.0 SUSPECT HOLDING - CONDEMNED ROOM ......................................................... 120

11. 0 CLIENT SUPPLIED EQUIPMENT ............................................................................. 132

SECTION IX – BILLS OF QUANTITIES AND SCHEDULE OF UNIT RATES ..................... 135

1.0 SPECIAL NOTES .......................................................................................................... 137

2.0 STATEMENT OF COMPLIANCE .............................................................................. 138

3.0 TECHNICAL SCHEDULE OF ITEMS TO BE SUPPLIED ...................................... 139

3.1 General Notes to the Tenderer .................................................................................... 139

4.0: TECHNICAL SCHEDULE ....................................................................................... 140

5.0 SCHEDULE OF UNIT RATES ..................................................................................... 142

6.0 PRELIMINARIES ......................................................................................................... 143

A) PRICING OF PRELIMINARIES ITEMS .................................................................... 143

BILL NO. 1 PRELIMINARIES ......................................................................................... 144

BILL NO. 1 PRELIMINARIES ......................................................................................... 145

BILL NO. 1 PRELIMINARIES ......................................................................................... 146

March, 2021 Page 5 of 192
Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir

SECTION X: STANDARD FORMS .............................................................................................................. 167

1.0 SCHEDULE OF CONTRACT DRAWINGS ............................................................................................. 168
(SEE ATTACHED DRAWINGS) ..................................................................................................................... 168

LETTER OF NOTIFICATION OF AWARD .................................................................................................. 168

LETTER OF ACCEPTANCE [LETTERHEAD PAPER OF THE EMPLOYER] .............................................. 170

FORM OF AGREEMENT .......................................................................................................................... 171

PERFORMANCE BANK GUARANTEE ....................................................................................................... 173

BANK GUARANTEE FOR ADVANCE PAYMENT .................................................................................. 175

TENDER QUESTIONNAIRE ...................................................................................................................... 178

STATEMENT OF FOREIGN CURRENCY REQUIREMENTS (NOT APPLICABLE) .................................... 179

DETAILS OF CONTRACTORS .................................................................................................................. 180

KEY PERSONNEL .................................................................................................................................... 181

CONTRACTS COMPLETED IN THE LAST FIVE (5) YEARS .................................................................. 182

SCHEDULE OF MAJOR ITEMS OF ......................................................................................................... 184

CONTRACTOR’S EQUIPMENT PROPOSED FOR CARRYING OUT THE WORKS .............................. 184

NAME, ADDRESS AND TELEPHONE, TELEX AND FACSIMILE OF BANKS ....................................... 185

SCHEDULE OF ON-GOING PROJECTS .................................................................................................. 186

REPUBLIC OF KENYA PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION .................................................................................................................................................. 187

NON-DEBARMENT STATEMENT FORM ................................................................................................. 188

DETAILS OF LITIGATIONS OR ARBITRATION PROCEEDINGS IN WHICH THE TENDERER IS

INVOLVED AS ONE OF THE PARTIES ..................................................................................................... 189

EVIDENCE OF FINANCIAL RESOURCES TO MEET QUALIFICATION REQUIREMENTS .................. 190

FINANCIAL REPORTS FOR THE LAST FIVE YEARS .............................................................................. 191

ANTI-CORRUPTION DECLARATION COMMITMENT/PLEDGE ............................................................... 192
SECTION I: INVITATION TO TENDER

RE: TENDER NO: CGWP/EU/T/034/2020-2021

TENDER NAME: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ABATTOIR PROCESS EQUIPMENT FOR THE PROPOSED NASUKUTA EXPORT ABATTOIR

The County Government of West Pokot, here and in the subsequent sections referred to as the procuring entity, in partnership with European Union (EU) now invites sealed Tenders from eligible candidates for the PROPOSED SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ABATTOIR PROCESSING EQUIPMENT.

1.1. The tender is National Open Tender;

1.2. Interested eligible candidates may obtain further information and inspect Tender Documents and the Design Drawings from the Supply Chain Management offices, Located at the County Government of West Pokot, County Treasury building during normal working hours or they may download the same from the county website www.westpokot.go.ke, and the national government tenders web-portal https://tenders.go.ke free of charge.

1.3. Prices quoted should be net inclusive of all taxes, must be in Kenya shillings and shall remain valid for 120 days from the closing date of tender;

1.4. The tenderer shall provide a Tender Security of Kes. 300,000.00 (Kenya Shillings Three Hundred Thousand Shillings Only) in the form as prescribed under line 19.3 of Section II – Instructions to Tenderers/Tender Data Sheet.

1.5. There shall be a mandatory pre-tender site visit scheduled for 10am, Tuesday 11th May 2021. Interested bidders are requested to meet at the Supply Chain Management Office, located at County Treasury Building, West Pokot County Headquarters at or before 9:00am.

1.6. Completed tender documents are to be enclosed in plain sealed envelopes marked with tender name and reference number as per Instructions to Tenders and addressed to:

CHIEF OFFICER
DEPARTMENT OF PASTORAL ECONOMY
COUNTY GOVERNMENT OF WEST POKOT
P.O BOX 314-30600, KAPENGURIA

To be deposited in the tender box situated at the Supply Chain Management offices, County treasury building so as to be received on or before 18th May, 2021 at 12:00 Noon. Tenders will be opened promptly thereafter at the county treasury boardroom ground floor in the presence of the candidates or their representatives who choose to attend on 18th May, 2021.

1.7. Late Tenders shall not be accepted.

1.8. Tenderers may request for clarifications via email to procurement@westpokot.go.ke.
1.9. Tenders must be accompanied by a tender Security of Kshs 300,000.00 in form of a bank guarantee from a reputable bank recognized by the Central Bank of Kenya valid for 150 days from the date of tender opening, payable to County Government of West Pokot.

1.10. Prices quoted should be inclusive of all taxes and delivery costs and must be in Kenya Shillings and shall remain valid for 120 days from the closing date of the tender.

_________________________
The Chief Officer
Department of Pastoral Economy
County Government of West Pokot
FORM OF TENDER

TO: .......................................................................................................................[Name of Employer]
............................................................................................................................[Date]
............................................................................................................................[Name of Contract]

Dear Sir,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to Supply, install, test and commission such Works and remedy any defects therein for the Sum of Kshs..........................................................[Amount in figures]

Kenya Shillings..........................................................[Amount in words]

2. We undertake, if our tender is accepted, to commence the works as soon as is reasonably possible after the receipt of the Project Manager’s notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.

3. We agree to abide by this tender until..............................[Insert date], and it shall remain binding upon us and may be accepted at any time before that date.

4. Unless and until a formal agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.

5. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this ............................... day of...............................20..................

Signature ................................................. in the capacity of.............................

Duly authorized to sign tenders for and on behalf of

.......................................................................................................................[Name of Tenderer]

of..............................................................................................................[Address of Tenderer]

Witness Name..............................................................................................

Address...........................................................................................................

Signature........................................................................................................

Date.................................................................................................................
FORM OF TENDER SECURITY FROM BANK

WHEREAS………………………………………………….(Hereinafter called “the Tenderer”) has submitted his tender dated …………………………….For the Supply, Installation, Testing and Commissioning of Abattoir Process Equipment at the Proposed Nasukuta Export Abattoir, West Pokot.

KNOW ALL PEOPLE by these presents that WE
…………………………………………………………………….Having our registered office at
………………………………………………………………………………………………………………………………………………………………………………………………………
(Hereinafter called “the Bank’), are bound unto
………………………………………………………………………………………………………………………………………………………………………………………………………
(Hereinafter called “the Employer”) in the sum of Kshs……………………………………
for which payment shall and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Bank this 
………………………Day of …………………………………….20 ……..
THE CONDITIONS of this obligation are:

1. If after tender opening the Tenderer withdraws his tender during the period of tender validity specified in the instructions to Tenderers or
2. If the Tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:
   (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
   (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer shall note that the amount claimed by his is due to him, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee shall remain in force for a period of 150 days from the date of tender opening, and any demand in respect thereof should reach the Bank not later than the said date.

………………………………………...…………………………………………………………………….
(Date) (Signature of the Bank)

………………………………………...…………………………………………………………………….
(Witness) (Seal)
FORM OF TENDER SECURITY FROM INSURANCE

WHEREAS…………………………………………………………………..(Hereinafter called “the Tenderer”) has submitted his tender dated ……………………. For the Supply, Installation, Testing and Commissioning of Abattoir Process Equipment at the Proposed Nasukuta Export Abattoir, West Pokot.

KNOW ALL PEOPLE by these presents that WE

……………………………………………………………………………………………………………………………………………………..

Having our registered office at

…………………………………………………………………………………………………………………………………………………….

(Hereinafter called “the Insurance’), are bound unto ………………………………………………….

(Hereinafter called “the Employer”) in the sum of Kshs………………………………………………

for which payment well and truly to be made to the said Employer, the Insurance binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Insurance this………………Day of …………………………………….20……….

THE CONDITIONS of this obligation are:

3. If after tender opening the Tenderer withdraws his tender during the period of tender validity specified in the instructions to Tenderers or

4. If the Tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:

   (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
   (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer shall note that the amount claimed by his is due to him, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee shall remain in force for a period of 150 days from the date of tender opening, and any demand in respect thereof should reach the Insurance not later than the said date.

……………………………………..………………..………………….

(Date) (Signature of the Insurance)

……………………………………..………………..………………….

(Witness) (Seal)

March, 2021
SECTION II: INSTRUCTIONS TO TENDERERS

1. General/Eligibility/Qualifications/Joint venture/Cost of tendering

1.1 The Employer as defined in the Appendix to Conditions of Contract invites tenderers for Contract works as described in the tender documents. The successful tenderer shall be expected to complete the Works by the intended completion date specified in the tender documents.

1.2 All tenderers shall provide the Qualification Information, a statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or has not been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation or supervision of the Works, and any of its affiliates, shall not be eligible to tender.

1.3 All tenderers shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.

1.4 In the event that pre-qualification of potential tenderers has been undertaken, only tenders from pre-qualified tenderers shall be considered for award of Contract. These qualified tenderers shall submit with their tenders any information updating their original pre-qualification applications or, alternatively, confirm in their tenders that the originally submitted pre-qualification information remains essentially correct as of the date of tender submission.

1.5 Where no pre-qualification of potential tenderers has been done, all tenderers shall include the following information and documents with their tenders, unless otherwise stated:

(a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the tender to commit the tenderer:

(b) Total monetary value of construction works done for the last five years.

(c) Experience in works of similar nature and size for the last five years, details of work underway or contractually committed, names and addresses of clients who may be contacted for further information on these Contracts.

(d) Major items of construction equipment proposed to carry out the Contract and an undertaking that they shall be available for the Contract.
(e) Qualifications and experience of key site management and technical personnel proposed for the Contract and an undertaking that they shall be available for the Contract.

(f) Reports on the financial standing of the tenderer, such as profit and loss statements and auditor’s reports for the last three years.

(g) Evidence of adequacy of working capital for this Contract (Access to line(s) of credit and availability of other financial resources).

(h) Authority to seek references from the tenderer’s bankers.

(i) Information regarding any litigation, current or during the last five years, in which the tenderer is involved, the parties concerned and disputed amount.

(j) Proposals for subcontracting components of the Works amounting to more than 10 percent of the Contract Price.

1.6 Tenders submitted by a joint venture of two or more firms as partners shall comply with the following requirements, unless otherwise stated:

(a) The tender shall include all the information listed in clause 1.5 above for each joint venture partner.

(b) The tender shall be signed so as to be legally binding on all partners.

(c) All partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms.

(d) One of the partners shall be nominated as being in charge, authorized to incur liabilities, and receive instructions for and behalf of all partners of the joint venture.

(e) The execution of the entire Sub-Contract, including payment, shall be done exclusively with the partner in charge.

1.7 To qualify for award of the Contract, tenderers shall meet the following minimum qualifying criteria.

(a) Annual volume of construction work of at least 2.5 times the estimated annual cash flow for the Contract.

(b) Experience as a Contractor in the construction of at least two works of similar nature and complexity equivalent to the proposed works over the last 5 years (to comply with this requirement, works cited should be at least 70 percent complete).

(c) Proposals for the timely acquisition (own, lease, hire, etc.) of the essential equipment listed as required for the Works.
(d) A Contract manager with at least five years’ experience in works of an equivalent nature and volume, including not less than three years as Manager; and

(e) Liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of not less than 4 months of the estimated payment flow under this Contract.

1.8 The figures for each of the partners of a joint venture shall be added together to determine the tenderer’s compliance with the minimum qualifying criteria of clause 1.7 (a) and (e); however, for a joint venture to qualify, each of its partners must meet at least 25 percent of minimum criteria 1.7 (a), (b) and (e) for an individual tenderer, and the partner in charge at least 40 percent of those minimum criteria. Failure to comply with this requirement shall result in rejection of the joint venture’s tender. Subcontractors’ experience and resources shall not be taken into account in determining the tenderer’s compliance with the qualifying criteria, unless otherwise stated.

1.9 Each tenderer shall submit only one tender, either individually or as a partner in a joint venture. A tenderer who submits or participates in more than one tender (other than as a subcontractor or in cases of alternatives that have been permitted or requested) shall cause all the proposals with the tenderer’s participation to be disqualified.

1.10 The tenderer shall bear all costs associated with the preparation and submission of his tender and the Employer shall in no case be responsible or liable for those costs.

1.11 The tenderer, at the tenderer’s own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the tenderer’s own expense.

1.12 The procuring entity’s employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.

1.13 The price to be changed for the tender document shall not exceed Kshs.5,000/=

1.14 The procuring entity shall allow the tenderer to review the tender document free of charge before purchase.
2. Tender Documents

2.1 The complete set of tender documents comprises the documents listed below and any addenda issued in accordance with Clause 2.4.
   a) Invitation to tender
   b) Form of tender
   c) Form of tender security
   d) Instructions to tenderer.
   e) Tender evaluation criteria.
   f) Conditions of subcontract.
   g) Bill of quantities
   h) Drawings
   i) Standard Forms

2.2 The tenderer shall examine all instructions, Forms to be filled and Specifications in the tender documents. Failure to furnish all information required in the tender documents, or submission of a tender not substantially responsive to the tendering documents in every respect shall be at the tenderer's risk and may result in rejection of his tender.

2.3 A prospective tenderer making an inquiry relating to the tender documents may notify the Employer in writing or by cable, telex or facsimile at the address indicated in the letter of invitation to tender. The Employer shall only respond to requests for clarification received earlier than seven days prior to the deadline for submission of tenders. Copies of the Employer's response shall be forwarded to all persons issued with tendering documents, including a description of the inquiry, but without identifying its source.

2.4 Before the deadline for submission of tenders, the Employer may modify the tendering documents by issuing addenda. Any addendum thus issued shall be part of the tendering documents and shall be communicated in writing or by cable, telex or facsimile to all tenderers. Prospective tenderers shall acknowledge receipt of each addendum in writing to the Employer.

2.5 To give prospective tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend, as necessary, the deadline for submission of tenders, in accordance with Clause 4.2 here below.

3. Preparation of Tenders

3.1 All documents relating to the tender and any correspondence shall be in English language.

3.2 The tender submitted by the tenderer shall comprise the following:
   (a) These Instructions to Tenderers, Form of Tender, Conditions of Contract, Appendix to Conditions of Contract and Specifications.
(b) Tender Security;
(c) Priced Bill of Quantities;
(d) Qualification Information Form and Documents;
(e) Alternative offers where invited; and
(f) Any other materials required to be completed and submitted by the tenderers.

3.3 The tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items for which no rate or price is entered by the tenderer shall not be paid for when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause relevant to the Contract, as of 30 days prior to the deadline for submission of tenders, shall be included in the tender price submitted by the tenderer.

3.4 The rates and prices quoted by the tenderer shall only be subject to adjustment during the performance of the Contract if provided for in the Appendix to Conditions of Contract and provisions made in the Conditions of Contract.

3.5 The unit rates and prices shall be in Kenya Shillings.

3.6 Tenders shall remain valid for a period of ninety (90) days from the date of submission. However, in exceptional circumstances, the Employer may request that the tenderers extend the period of validity for a specified additional period. The request and the tenderers’ responses shall be made in writing. A tenderer may refuse the request without forfeiting the Tender Security. A tenderer agreeing to the request shall not be required or permitted to otherwise modify the tender, but shall be required to extend the validity of Tender Security for the period of the extension, and in compliance with Clause 3.7 - 3.11 in all respects.

3.7 The tenderer shall furnish, as part of the tender, a Tender Security in the amount and form specified in the appendix to invitation to tenderers. This shall be in the amount not exceeding 2 percent of the tender price.

3.8 The format of the Tender Security should be in accordance with the form of Tender Security included in Section G - Standard forms or any other form acceptable to the Employer. Tender Security shall be valid for 30 days beyond the validity of the tender.

3.9 Any tender not accompanied by an acceptable Tender Security shall be rejected. The Tender Security of a joint venture must define as “Tenderer” all joint venture partners and list them in the following manner: a joint venture consisting of“…………”,”…………” and “…………”.

3.10 The Tender Securities of unsuccessful tenderers shall be returned within 28 days of the end of the tender validity period specified in Clause 3.6.
3.11 The Tender Security of the successful tenderer shall be discharged when the tenderer has signed the Contract Agreement and furnished the required Performance Security.

3.12 The Tender Security may be forfeited
   (a) If the tenderer withdraws the tender after tender opening during the period of tender validity.
   (b) If the tenderer does not accept the correction of the tender price, pursuant to Clause 5.7.
   (c) In the case of a successful tenderer, if the tenderer fails within the specified time limit to
      (i) Sign the Agreement, or
      (ii) Furnish the required Performance Security.

3.13 Tenderers shall submit offers that comply with the requirements of the tendering documents, including the basic technical design as indicated in the Drawings and Specifications. Alternatives shall not be considered, unless specifically allowed in the invitation to tender. If so allowed, tenderers wishing to offer technical alternatives to the requirements of the tendering documents must also submit a tender that complies with the requirements of the tendering documents, including the basic technical design as indicated in the Drawings and Specifications. In addition to submitting the basic tender, the tenderer shall provide all information necessary for a complete evaluation of the alternative, including design calculations, technical specifications, breakdown of prices, proposed construction methods and other relevant details. Only the technical alternatives, if any, of

The lowest evaluated tender conforming to the basic technical requirements shall be considered.

3.14 The tenderer shall prepare one original of the documents comprising the tender documents as described in Clause 3.2 of these Instructions to Tenderers, bound with the volume containing the Form of Tender, and clearly marked “ORIGINAL”. In addition, the tenderer shall submit copies of the tender, in the number specified in the invitation to tender, and clearly marked as “COPIES OF THE ORIGINAL”. In the event of discrepancy between them, the ORIGINAL shall prevail.

3.15 The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by a person or persons duly authorised to sign on behalf of the tenderer, pursuant to Clause 1.5 (a) or 1.6 (b), as the case may be. All pages of the tender where alterations or additions have been made shall be initialled by the person or persons signing the tender.
3.16 Clarification of tenders shall be requested by the tenderer to be received by the procuring entity not later than 7 days prior to the deadline for submission of tenders.

3.17 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

3.18 The tender security shall be in the amount of 0.5 – 2 per cent of the tender price.

4. Submission of Tenders

4.1 The tenderer shall seal the original and all copies of the tender in two inner envelopes and one outer envelope, duly marking the inner envelopes as “ORIGINAL” and “COPIES OF THE ORIGINAL” as appropriate. The inner and outer envelopes shall:

(a) Be addressed to the Employer at the address provided in the invitation to tender.

(b) Bear the name and identification number of the Contract as defined in the invitation to tender; and

(c) Provide a warning not to open before the specified time and date for tender opening.

4.2 Tenders shall be delivered to the Employer at the address specified above not later than the time and date specified in the invitation to tender. However, the Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with Sub-Clause 2.5 in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline shall then be subject to the new deadline.

4.3 Any tender received after the deadline prescribed in clause 4.2 shall be returned to the tenderer un-opened.

4.4 Tenderers may modify or withdraw their tenders by giving notice in writing before the deadline prescribed in clause 4.2. Each tenderer’s modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with clause 3.13 and 4.1, with the outer and inner envelopes additionally marked “MODIFICATION” and “WITHDRAWAL”, as appropriate. No tender may be modified after the deadline for submission of tenders.

4.5 Withdrawal of a tender between the deadline for submission of
tenders and the expiration of the period of tender validity specified in the invitation to tender or as extended pursuant to Clause 3.6 may result in the forfeiture of the Tender Security pursuant to Clause 3.11.

4.6 Tenderers may only offer discounts to, or otherwise modify the prices of their tenders by submitting tender modifications in accordance with Clause 4.4 or be included in the original tender submission.

5 Tender opening and evaluation

5.1 The tenders shall be opened by the Employer, including modifications made pursuant to Clause 4.4, in the presence of the tenderers’ representatives who choose to attend at the time and in the place specified in the invitation to tender. Envelopes marked “WITHDRAWAL” shall be opened and read out first. Tenderers’ and Employer’s representatives who are present during the opening shall sign a register evidencing their attendance.

5.2 The tenderers’ names, the tender prices, the total amount of each tender and of any alternative tender (if alternatives have been requested or permitted), any discounts, tender modifications and withdrawals, the presence or absence of Tender Security, and such other details as may be considered appropriate, shall be announced by the Employer at the opening. Minutes of the tender opening, including the information disclosed to those present shall be prepared by the Employer.

5.3 Information relating to the examination, clarification, evaluation, and comparison of tenders and recommendations for the award of Contract shall not be disclosed to tenderers or any other persons not officially concerned with such process until the award to the successful tenderer has been announced. Any effort by a tenderer to influence the Employer’s officials, processing of tenders or award decisions may result in the rejection of his tender.

5.4 To assist in the examination, evaluation, and comparison of tenders, the Employer at his discretion, may ask any tenderer for clarification of the tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, telex or facsimile but no change in the price or substance of the tender shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered in the evaluation of the tenders in accordance with Clause 5.7.

5.5 Prior to the detailed evaluation of tenders, the Employer shall determine whether each tender (a) meets the eligibility criteria defined in Clause 1.7; (b) has been properly signed; (c) is accompanied by the required securities; and (d) is substantially responsive to the requirements of the tendering documents. A substantially responsive tender is one which conforms to all the terms, conditions and specifications of the tendering documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the works; (b) which limits in any substantial way, inconsistent with the tendering documents, the Employer’s rights or the tenderer’s obligations under the Contract; or (c) whose rectification would
affect unfairly the competitive position of other tenderers presenting substantially responsive tenders.

5.6 If a tender is not substantially responsive, it shall be rejected, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

5.7 Tenders determined to be substantially responsive shall be checked for any arithmetic errors. Errors shall be corrected as follows:

(a) Where there is a discrepancy between the amount in figures and the amount in words, the amount in words shall prevail; and

(b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted shall prevail, unless in the opinion of the Employer, there is an obvious typographical error, in which case the adjustment shall be made to the entry containing that error.

(c) In the event of a discrepancy between the tender amount as stated in the Form of Tender and the corrected tender figure in the main summary of the Bill of Quantities, the amount as stated in the Form of Tender shall prevail.

(d) The Error Correction Factor shall be computed by expressing the difference between the tender amount and the corrected tender sum as a percentage of the corrected Builder’s Work (i.e. Corrected tender sum less P.C. and Provisional Sums)

(e) The Error Correction Factor shall be applied to all Builder’s Work (as a rebate or addition as the case may be) for the purposes of valuations for Interim Certificates and valuation of variations.

(f) The amount stated in the tender shall be adjusted in accordance with the above procedure for the correction of errors and, with concurrence of the tenderer, shall be considered as binding upon the tenderer. If the tenderer does not accept the corrected amount, the tender may be rejected and the Tender Security may be forfeited in accordance with clause 3.11.

5.8 The Employer shall evaluate and compare only the tenders determined to be substantially responsive in accordance with Clause 5.5.

5.9 In evaluating the tenders, the Employer shall determine for each tender the evaluated tender price by adjusting the tender price as follows:

(a) Making any correction for errors pursuant to clause 5.7;
(b) Excluding provisional sums and the provision, if any, for contingencies in the Bill of Quantities, but including Dayworks where priced competitively.

(c) Making an appropriate adjustment for any other acceptable variations, deviations, or alternative offers submitted in accordance with clause 3.12; and

(d) Making appropriate adjustments to reflect discounts or other price modifications offered in accordance with clause 4.6

5.10 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the tender documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in tender evaluation.

5.11 The tenderer shall not influence the Employer on any matter relating to his tender from the time of the tender opening to the time the Contract is awarded. Any effort by the tenderer to influence the Employer or his employees in his decision on tender evaluation, tender comparison or Contract award may result in the rejection of the tender.

5.12 Firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias provided that they do not Contract work valued at more than 50% of the Contract Price excluding Provisional Sums to an non-indigenous Contractor.

6. Award of Contract

6.1 Subject to Clause 6.2, the award of the Contract shall be made to the tenderer whose tender has been determined to be substantially responsive to the tendering documents and who has offered the lowest evaluated tender price, provided that such tenderer has been determined to be (a) eligible in accordance with the provision of Clauses 1.2, and (b) qualified in accordance with the provisions of clause 1.7 and 1.8.

6.2 Notwithstanding clause 6.1 above, the Employer reserves the right to accept or reject any tender, and to cancel the tendering process and reject all tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the action.

6.3 The tenderer whose tender has been accepted shall be notified of the award prior to expiration of the tender validity period in writing or by cable, telex or facsimile. This notification (hereinafter and in all Contract documents called the “Letter of Acceptance”) shall state the sum (hereinafter and in all Contract
documents called the “Contract Price”) that the Employer shall pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract. At the same time the other tenderers shall be informed that their tenders have not been successful.

The Contract shall be formed on the parties signing the Contract.

6.4 The Agreement shall incorporate all agreements between the Employer and the successful tenderer. Within 14 days of receipt the successful tenderer shall sign the Agreement and return it to the employer.

6.5 Within 21 days after receipt of the Letter of Acceptance, the successful tenderer shall deliver to the Employer a Performance Security in the amount stipulated in the Appendix to Conditions of Contract and in the form stipulated in the Tender documents.

The Performance Security shall be in the amount and specified form

6.6 Failure of the successful tenderer to comply with the requirements of clause 6.5 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Tender Security.

6.7 Upon the furnishing by the successful tenderer of the Performance Security, the Employer shall promptly notify the other tenderers that their tenders have been unsuccessful.

6.8 Preference where allowed in the evaluation of tenders shall not be allowed for Contracts not exceeding one year (12 months)

6.9 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.

6.10 The parties to the contract shall have it signed within 30 days from the date of notification of Contract award unless there is an administrative review request.

6.11 Contract price variations shall not be allowed for Contracts not exceeding one year (12 months)

6.12 Where Contract price variation is allowed, the valuation shall not exceed 15% of the original Contract price.

6.13 Price variation request shall be processed by the procuring entity Within 30 days of receiving the request.

6.14 The procuring entity may at any time terminate procurement proceedings before Contract award and shall not be liable to any person for the termination.

6.15 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.
6.16 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a Contract after notification of Contract award shall be considered for debarment from participating in future public procurement.

7. **Corrupt and Fraudulent Practices**

7.1 The procuring entity requires that tenderers observe the highest standards of ethics during procurement process and execution of Contracts. A tenderer shall sign a declaration that he has not and shall not be involved in corrupt and fraudulent practices.
## SECTION III: APPENDIX TO INSTRUCTIONS TO TENDERERS

<table>
<thead>
<tr>
<th>INSTRUCTIONS TO TENDERERS REFERENCE</th>
<th>PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>The employer is COUNTY GOVERNMENT OF WEST POKOT</td>
</tr>
<tr>
<td>1.7</td>
<td>Qualification criteria as set out in the tender evaluation criteria</td>
</tr>
<tr>
<td>1.8</td>
<td>N/A</td>
</tr>
<tr>
<td>1.9</td>
<td>Joint venture or individual tenderers only.</td>
</tr>
<tr>
<td>1.13</td>
<td>N/A</td>
</tr>
<tr>
<td>2.3</td>
<td>or through email address: <a href="mailto:procurement@westpokot.go.ke">procurement@westpokot.go.ke</a>.</td>
</tr>
<tr>
<td>3.2(e)</td>
<td>N/A</td>
</tr>
<tr>
<td>3.4</td>
<td>N/A</td>
</tr>
<tr>
<td>3.6</td>
<td>Validity period of 120 days</td>
</tr>
<tr>
<td>3.8</td>
<td>Tender surety shall be valid for 150 days from the date of tender opening.</td>
</tr>
<tr>
<td>3.12(b)</td>
<td>N/A</td>
</tr>
<tr>
<td>3.14</td>
<td>One original and One copy of original</td>
</tr>
<tr>
<td>3.18</td>
<td>Tender security of Kshs. 300,000.00 from a reputable bank recognized by the Central Bank of Kenya or an insurance company approved by PPRA</td>
</tr>
<tr>
<td>5.2</td>
<td>Alternative tenders not allowed</td>
</tr>
<tr>
<td>5.7</td>
<td>N/A: PPAD 2015 Applies</td>
</tr>
<tr>
<td>5.9</td>
<td>N/A</td>
</tr>
<tr>
<td>5.12</td>
<td>N/A</td>
</tr>
<tr>
<td>6.5</td>
<td>Successful tenderer to provide performance security of 5% of the Contract sum from reputable bank recognized by Central Bank of Kenya prior to Contract signing</td>
</tr>
<tr>
<td>6.8</td>
<td>N/A</td>
</tr>
<tr>
<td>6.12</td>
<td>-The word “valuation” should read “variation”</td>
</tr>
<tr>
<td></td>
<td>-Variation shall apply as prescribed by the Public Procurement and Asset Disposal Act, 2015</td>
</tr>
<tr>
<td>6.13</td>
<td>Shall be 60 days from the date of receipt of the request</td>
</tr>
<tr>
<td>8.0</td>
<td>Due diligence shall be conducted before award in accordance with the Public Procurement and Asset Disposal Act, 2015</td>
</tr>
<tr>
<td>9.0</td>
<td>Tenderers shall be required to provide litigation history which may be subjected to due diligence to ascertain the possibility of negatively affecting performance.</td>
</tr>
</tbody>
</table>
Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir

SECTION IV: TENDER EVALUATION CRITERIA

After tender opening, the tenders shall be evaluated in 3 stages, namely:

i. Preliminary evaluation,

ii. Technical Evaluation; and

iii. Financial Evaluation,

iv. Due diligence

STAGE 1 - PRELIMINARY EVALUATION

<table>
<thead>
<tr>
<th>S/No</th>
<th>MANDATORY REQUIREMENTS(MR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR1</td>
<td>Valid Copy of certificate of incorporation/ Registration.</td>
</tr>
<tr>
<td>MR2</td>
<td>Valid Current Tax Compliance Certificate and PIN certificate - If Joint Venture, from each member of the Joint Venture.</td>
</tr>
<tr>
<td>MR3</td>
<td>Valid National Construction Authority (NCA 6 and above) registration Certificate for Mechanical works In the event of a joint venture one of the partners should submit NCA 6 and above for the Mechanical Works</td>
</tr>
<tr>
<td>MR4</td>
<td>Duly filled, signed and stamped tender questionnaire</td>
</tr>
<tr>
<td>MR5</td>
<td>Duly filled and signed Confidential business questionnaire</td>
</tr>
<tr>
<td>MR6</td>
<td>Duly filled and signed Anticorruption declaration</td>
</tr>
<tr>
<td>MR7</td>
<td>Submission of original and (1) copy of tender document.</td>
</tr>
<tr>
<td>MR8</td>
<td>The original and (1) copy of tender documents should be properly Stapled, Tape Bound and paginated in the correct sequence and all pages must be initialed/signed/stamped. NB: Spiral Binding and use of Spring or Box Files shall not be allowed and shall result in automatic disqualification.</td>
</tr>
<tr>
<td>MR9</td>
<td>Valid Copy of Single Business permit – for the year 2021</td>
</tr>
<tr>
<td>MR10</td>
<td>The Tender Security of Kshs 300,000.00 valid for 150 days in form of Bank Guarantee from a reputable bank recognized by the Central Bank of Kenya or from an insurance company approved by PPRA.</td>
</tr>
<tr>
<td>MR11</td>
<td>Submission of valid CR12 form showing the list directors /shareholding (issued within the last 1 year) or National Identity Card for Sole Proprietor and ALL IDs copies</td>
</tr>
<tr>
<td>MR12</td>
<td>Duly filled and signed form of tender.</td>
</tr>
<tr>
<td>MR13</td>
<td>Provide proof of Power of attorney (of Tender Signatory)</td>
</tr>
<tr>
<td>MR 14</td>
<td>Details of any current litigation or arbitration proceedings in which the tenderer is involved as one of the parties</td>
</tr>
<tr>
<td>MR 15</td>
<td>Submit a copy of certified Audited accounts for the last three (3) years (2018, 2019 and 2020).</td>
</tr>
<tr>
<td>MR 16</td>
<td>Non debarment form duly filled and signed.</td>
</tr>
</tbody>
</table>

Tender Document submitted without ANY of the above-mentioned Mandatory documents shall be rejected by the COUNTY GOVERNMENT OF WEST POKOT’s Evaluation Committee and shall therefore not proceed to the technical and financial evaluation.

N.B
The employer may seek further clarification/confirmation if necessary, to confirm authenticity/compliance of any condition of the tender.

**STAGE 2 - TECHNICAL EVALUATION**

Award of points for the Technical Evaluation shall be as shown in Table 1 below:

Table 1: Scores for the Technical Evaluation

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>POINT SCORE SCALE</th>
<th>Evaluation Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EXPERIENCE</td>
<td>Max 40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attach reference letters/contracts/purchase orders for different firms as evidences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1 Value of related works handled in Kshs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Four projects of equal or higher value in the last five years. OR</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Any <strong>four (4)</strong> projects of value between 50% and 100% of value. OR</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Any <strong>four</strong> projects less than 50% value of the tendered works.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. No submission of project record</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2 Nature, scope and specificity of related works handled in the last five years</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Four projects of similar nature as per this scope of works OR</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Any <strong>four (4)</strong> projects of related nature but not same complexity e.g. water piping, hoisted water works, installation of rails and railing systems OR</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Any four unrelated works e.g. buildings etc.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. No submission in details works undertaken</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>KEY PERSONNEL</td>
<td>Max 20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical skill in terms of human resource. Attach CVs and certified copies of academic certificates detailing qualifications of at least (3) key personnel who shall be involved in this assignment. The persons must be working with the organization or sign an undertaking to work with the firm by the time of submitting this tender. Each of the 5 personnel will be evaluated on the following parameters:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Site Agent (Max 10 marks)</td>
<td>Technical qualification (4)</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Experience in years (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registration with relevant professional body (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Mechanical engineer (Max 5 marks)</td>
<td>Technical qualification (2)</td>
<td>5</td>
</tr>
</tbody>
</table>

March, 2021
## Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir

### ITEM DESCRIPTION

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>POINT SCALE</th>
<th>Evaluation Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Experience in years (2) Registration with relevant professional body (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Technical qualification (2) Experience in years (2) Registration with relevant professional body (1)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>PLANT AND EQUIPMENT</td>
<td>Max 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relevant Equipment</td>
<td></td>
<td>0-10</td>
</tr>
<tr>
<td></td>
<td>a. Lorry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Steel cutter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Deburring tools</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Pipe calibration tools</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Fabrication equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. calibrated leak test tools</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>g. PPE Equipment’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>WORK METHODOLOGY</td>
<td>Max 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program of works</td>
<td></td>
<td>0-2.5</td>
</tr>
<tr>
<td></td>
<td>Detailed Methodology</td>
<td></td>
<td>0-2.5</td>
</tr>
<tr>
<td></td>
<td>Proposed Equipment Scheduling/Work statement.</td>
<td></td>
<td>0-2.5</td>
</tr>
<tr>
<td></td>
<td>Methodology on safety during the installation period.</td>
<td></td>
<td>0-2.5</td>
</tr>
<tr>
<td>5</td>
<td>FINANCIAL CAPACITY</td>
<td>Max 20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Audited financial statements for the last three years (2018, 2019 &amp; 2020)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>b) Line of credit or indication of self-financing</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>c) Positive current (Assets/Liability) ratio</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>d) Average annual Turnover of the last 3 years, which must be above this contract amount.</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>MAX 100</td>
<td></td>
</tr>
</tbody>
</table>

Any bidder who scores 70 points and above in this Technical Evaluation shall be considered for further evaluation.
STAGE 3 - FINANCIAL EVALUATION

Only tenderer’s who score 70% and above of the overall marks on the technical evaluation shall qualify for financial evaluation.

This shall be carried out only for those tenders that have passed BOTH mandatory requirements and Technical evaluation. The client shall;

1. Undertake price comparison and ranking of prices.
2. The prices shall be compared and checked for completeness including all local taxes

STAGE 4 – DUE DILIGENCE & RECOMMENDATION FOR AWARD

Particulars of post-qualification if applicable. The Client may inspect the premises for due diligence to seek further clarification/confirmation if necessary, to confirm authenticity/compliance of any condition of the tender/qualifications of the tenderer in line with Section 83 of the Public Procurement and Asset Disposal Act, 2015.

The tenderer shall not be awarded the Contract if they fail to pass the compliance test. The second lowest tenderer shall be considered for due diligence.

Award Criteria: The firm achieving the lowest evaluated price shall be awarded the Contract in line with Section 86 of the Public Procurement and Disposal Act, 2015

Particulars of performance security 5% of Contract sum.
SECTION V: CONDITIONS OF CONTRACT

1. Definitions

1.1 In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated;

“Bill of Quantities” means the priced and completed Bill of Quantities forming part of the tender.

“Compensation Events” are those defined in Clause 24 hereunder.

“The Completion Date” means the date of completion of the Works as certified by the Project Manager, in accordance with Clause 31.

“The Contract” means the agreement entered into between the Employer and the Contractor as recorded in the Agreement Form and signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein to execute, complete, and maintain the Works.

“The Contractor” refers to the person or corporate body whose tender to carry out the Works has been accepted by the Employer.

“The Contractor’s Tender is the completed tendering document submitted by the Contractor to the Employer.

“The Contract Price” is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

“Days” are calendar days; “Months” are calendar months.

“A Defect” is any part of the Works not completed in accordance with the Contract.

“The Defects Liability Certificate” is the certificate issued by Project Manager upon correction of defects by the Contractor.

“The Defects Liability Period” is the period named in the Contract Data and calculated from the Completion Date.

“Drawings” include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

“Dayworks” are Work inputs subject to payment on a time basis for labour and the associated materials and plant.

“Employer” or the “Procuring entity” as defined in the Public Procurement Regulations (i.e. Central or Local Government administration,
Universities, Public Institutions and Corporations, etc.) is the party who employs the Contractor to carry out the Works.

“Equipment” is the Contractor’s machinery and vehicles brought temporarily to the Site for the execution of the Works.

“The Intended Completion Date” is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.

“Materials” are all supplies, including consumables, used by the Contractor for incorporation in the Works.

“Plant” is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

“Project Manager” is the person named in the Appendix to Conditions of Contract (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract and shall be an “Architect” or a “Quantity Surveyor” registered under the Architects and Quantity Surveyors Act Cap525 or an “Engineer” registered under Engineers Registration Act Cap 530.

“Site” is the area defined as such in the Appendix to Condition of Contract.

“Site Investigation Reports” are those reports that may be included in the tendering documents which are factual and interpretative about the surface and subsurface conditions at the Site.

“Specifications” means the Specifications of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

“Start Date” is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with the Site possession date(s).

“A Contractor” is a person or corporate body who has a Contract with the Contractor to carry out a part of the Work in the Contract, which includes Work on the Site.

“A Variation” is an instruction given by the Project Manager which varies the Works.

“The Works” are what the Contract requires the Contractor to supply, install, test and handover to the Employer, as defined in the Appendix to Conditions of Contract.
2. Interpretation

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning in English Language unless specifically defined. The Project Manager shall provide instructions clarifying queries about these Conditions of Contract.

2.2 If sectional completion is specified in the Appendix to Conditions of Contract, reference in the Conditions of Contract to the Works, the Completion Date and the Intended Completion Date apply to any section of the Works (other than references to the Intended Completion Date for the whole of the Works).

2.3 The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority:

(1) Agreement,

(2) Letter of Acceptance,

(3) Contractor’s Tender,

(4) Appendix to Conditions of Contract,

(5) Conditions of Contract,

(6) Specifications,

(7) Drawings,

(8) Bill of Quantities,

(9) Any other documents listed in the Appendix to Conditions Of Contract as forming part of the Contract.

Immediately after the execution of the Contract, the Project Manager shall furnish both the Employer and the Contractor with two copies each of all the Contract documents. Further, as and when necessary the Project Manager shall furnish the Contractor [always with a copy to the Employer] with three [3] copies of such further drawings or details or descriptive schedules as are reasonably necessary either to explain or amplify the Contract drawings or to enable the Sub-

Contractor to carry out and complete the Works in accordance with these Conditions.
3. **Language and Law**

   3.1 Language of the Contract and the law governing the Sub-Contract shall be English language and the Laws of Kenya respectively unless otherwise stated.

4. **Project Manager’s Decisions**

   4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. **Delegation**

   5.1 The Project Manager may delegate any of his duties and responsibilities to others after notifying the Contractor.

6. **Communications**

   6.1 Communication between parties shall be effective only when in writing. A notice shall be effective only when it is delivered.

7. **Subcontracting**

   7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Sub-Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor’s obligations.

8. **Other Contractors**

   8.1 The Contractor shall cooperate and share the Site with other Contractors, public authorities, utilities etc. as listed in the Appendix to Conditions of Contract and also with the Employer, as per the directions of the Project Manager. The Contractor shall also provide facilities and services for them. The Employer may modify the said List of Other Contractors etc., and shall notify the Contractor of any such modification.

9. **Personnel**

   9.1 The Contractor shall employ the key personnel named in the Qualification Information, to carry out the functions stated in the said Information or other personnel approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Qualification Information. If the Project Manager asks the Contractor to remove a person who is a member of the Contractor’s staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Work in the Contract.
10. **Works**

10.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings. The Works may commence on the Start Date and shall be carried out in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

11. **Safety and Temporary Works**

11.1 The Contractor shall be responsible for the design of temporary works. However before erecting the same, he shall submit his designs including specifications and drawings to the Project Manager and to any other relevant third parties for their approval. No erection of temporary works shall be done until such approvals are obtained.

11.2 The Project Manager’s approval shall not alter the Contractor’s responsibility for design of the Temporary works and all drawings prepared by the Contractor for the execution of the temporary or permanent Works, shall be subject to prior approval by the Project Manager before they can be used.

11.3 The Contractor shall be responsible for the safety of all activities on the Site.

12. **Discoveries**

12.1 Anything of historical or other interest or of significant value unexpectedly discovered on Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager’s instructions for dealing with them.

13. **Work Program**

13.1 Within the time stated in the Appendix to Conditions of Contract, the Contractor shall submit to the Project Manager for approval a program showing the general methods, arrangements, order, and timing for all the activities in the Works. An update of the program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Work, including any changes to the sequence of the activities. The Contractor shall submit to the Project Manager for approval an updated program at intervals no longer than the period stated in the Appendix to Conditions of Contract. If the Contractor does not submit an updated program within this period, the Project Manager may withhold the amount stated in the said Appendix from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted. The Project Manager’s approval of the program shall not alter the Contractor’s obligations. The Contractor may revise the program and submit it to the Project Manager again at any time. A revised program shall show the effect of Variations and Compensation Events.
14. **Possession of Site**

14.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Appendix to Conditions of Contract, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

15. **Access to Site**

15.1 The Contractor shall allow the Project Manager and any other person authorised by the Project Manager, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

16. **Instructions**

16.1 The Contractor shall carry out all instructions of the Project Manager which are in accordance with the Contract.

17. **Extension or Acceleration of Completion Date**

17.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a variation is issued which makes it impossible for completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining Work, which would cause the Contractor to incur additional cost. The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager in writing for a decision upon the effect of a Compensation Event or variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay caused by such failure shall not be considered in assessing the new (extended) Completion Date.

17.2 No bonus for early completion of the Works shall be paid to the Contractor by the Employer.

18. **Management Meetings**

18.1 A Contract management meeting shall be held monthly and attended by the Project Manager and the Contractor. Its business shall be to review the plans for the remaining Work and to deal with matters raised in accordance with the early warning procedure. The Project Manager shall record the minutes of management meetings and provide copies of the same to those attending the meeting and the Employer. The responsibility of the parties for actions to be taken shall be decided by the project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

19. **Early Warning**

19.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the Work, increase the Contract Price or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected
effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.

19.2 The Contractor shall cooperate with the Project Manager in making and considering proposals on how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the Work and in carrying out any resulting instructions of the Project Manager.

20. Defects

20.1 The Project Manager shall inspect the Contractor’s work and notify the Contractor of any defects that are found. Such inspection shall not affect the Contractor’s responsibilities. The Project Manager may instruct the Contractor to search for a defect and to uncover and test any Work that the Project Manager considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor. However, if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.

20.2 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Appendix to Conditions of Contract. The Defects Liability Period shall be extended for as long as defects remain to be corrected.

20.3 Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Project Manager’s notice. If the Contractor has not corrected a defect within the time specified in the Project Manager’s notice, the Project Manager shall assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

21. Bills of Quantities

21.1 The Bills of Quantities shall contain items for the construction, installation, testing and commissioning of the Work to be done by the Contractor. The Contractor shall be paid for the quantity of the Work done at the rate in the Bills of Quantities for each item.

21.2 If the final quantity of the Work done differs from the quantity in the Bills of Quantities for the particular item by more than 25 percent and provided the change exceeds 1 percent of the Initial Contract price, the Project Manager shall adjust the rate to allow for the change.

21.3 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bills of Quantities.

22. Variations

22.1 All variations shall be included in updated programs produced by the Contractor.

22.2 The Contractor shall provide the Project Manager with a quotation for carrying out the variations when requested to do so. The Project Manager shall assess the quotation, which shall be given within seven days of the request or within any longer period as may be stated by the Project Manager and before the Variation is ordered.
22.3 If the work in the variation corresponds with an item description in the Bills of Quantities and if in the opinion of the Project Manager, the quantity of work is not above the limit stated in Clause 21.2 or the timing of its execution does not cause the cost per unit of quantity to change, the rate in the Bills of Quantities shall be used to calculate the value of the variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the variation does not correspond with items in the Bills of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of Work.

22.4 If the Contractor’s quotation is unreasonable, the Project Manager may order the variation and make a change to the Contract price, which shall be based on the Project Manager’s own forecast of the effects of the variation on the Contractor’s costs.

22.5 If the Project Manager decides that the urgency of varying the Work would prevent a quotation being given and considered without delaying the Work, no quotation shall be given and the variation shall be treated as a Compensation Event.

22.6 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

22.7 When the Program is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.

23. **Payment Certificates, Currency of Payments and Advance payments**

**Advance payments**

23.1 The Contractor shall submit to the Project Manager monthly applications for payment giving sufficient details of the Work done and materials on Site and the amounts which the Contractor considers himself to be entitled to. The Project Manager shall check the monthly application and certify the amount to be paid to the Contractor within 14 days. The value of Work executed and payable shall be determined by the Project Manager.

23.2 The value of Work executed shall comprise the value of the quantities of the items in the Bills of Quantities completed, materials delivered on Site, variations and compensation events. Such materials shall become the property of the Employer once the Employer has paid the Contractor for their value. Thereafter, they shall not be removed from Site without the Project Manager’s instructions except for use upon the Works.

23.3 Payments shall be adjusted for deductions for retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of issue of each certificate. If the Employer makes a late payment, the Contractor shall be paid simple interest on the late payment in the next payment. Interest shall be calculated on the basis of number of days delayed at a rate three percentage points above the Central Bank of Kenya’s average rate for base lending prevailing as of the first day the payment becomes overdue.

23.4 If an amount certified is increased in a later certificate or as a result of an award by an Arbiterator, the Contractor shall be paid interest upon the delayed payment from the first day the payment becomes overdue.
payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.

23.5 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

23.6 The Contract Price shall be stated in Kenya Shillings. All payments to the Contractor shall be made in Kenya Shillings and foreign currency in the proportion indicated in the tender, or agreed prior to the execution of the Contract Agreement and indicated therein. The rate of exchange for the calculation of the amount of foreign currency payment shall be the rate of exchange indicated in the Appendix to Conditions of Contract. If the Contractor indicated foreign currencies for payment other than the currencies of the countries of origin of related goods and services the Employer reserves the right to pay the equivalent at the time of payment in the currencies of the countries of such goods and services. The Employer and the Project Manager shall be notified promptly by the Contractor of any changes in the expected foreign currency requirements of the Contractor during the execution of the Works as indicated in the Schedule of Foreign Currency Requirements and the foreign and local currency portions of the balance of the Contract Price shall then be amended by agreement between Employer and the Contractor in order to reflect appropriately such changes.

23.7 In the event that an advance payment is granted, the following shall apply:

a) On signature of the Contract, the Contractor shall at his request, and without furnishing proof of expenditure, be entitled to an advance of 10% (ten percent) of the original amount of the Contract. The advance shall not be subject to retention money.

b) No advance payment may be made before the Contractor has submitted proof of the establishment of deposit or a directly liable guarantee satisfactory to the Employer in the amount of the advance payment. The guarantee shall be in the same currency as the advance.

c) Reimbursement of the lump sum advance shall be made by deductions from the Interim payments and where applicable from the balance owing to the Contractor. Reimbursement shall begin when the amount of the sums due under the Contract reaches 20% of the original amount of the Contract. It shall have been completed by the time 80% of this amount is reached.

The amount to be repaid by way of successive deductions shall be calculated by means of the formula:

\[ R = \frac{A(x1 - x11)}{x} \]
Where

\[ R = \text{the amount to be reimbursed} \]
\[ A = \text{the amount of the advance which has been granted} \]
\[ X_1 = \text{the amount of proposed cumulative payments as a percentage of the original amount of the Contract. This figure shall exceed 20\% but not exceed 80\%.} \]
\[ X_{11} = \text{the amount of the previous cumulative payments as a percentage of the original amount of the Contract. This figure shall be below 80\% but not less than 20\%.} \]

24. Compensation Events

24.1 The following issues shall constitute Compensation Events:

(a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Appendix to Conditions of Contract.

(b) The Employer modifies the List of Other Contractors, etc., in a way that affects the Work of the Contractor under the Contract.

(c) The Project Manager orders a delay or does not issue drawings, specifications or instructions required for execution of the Works on time.

(d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon the Work, which is then found to have no defects.

(e) The Project Manager unreasonably does not approve a Contract to be let.

(f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to tenderers (including the Site investigation reports), from information available publicly and from a visual inspection of the Site.

(g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer or additional work required for safety or other reasons.
Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir

(h) Other Contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.

(i) The effects on the Contractor of any of the Employer’s risks

(j) The Project Manager unreasonably delays issuing a Certificate of Completion.

(k) Other compensation events described in the Contract or determined by the Project Manager shall apply.

24.2 If a compensation event would cause additional cost or would prevent the Work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

24.3 As soon as information demonstrating the effect of each compensation event upon the Contractor’s forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor’s forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager’s own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

24.4 The Contractor shall not be entitled to compensation to the extent that the Employer’s interests are adversely affected by the Contractor not having given early warning or not having co-operated with the Project Manager.

24.5 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the Appendix to Conditions of Contract.

24.6 The Contractor shall give written notice to the Project Manager of his intention to make a claim within thirty days after the event giving rise to the claim has first arisen. The claim shall be submitted within thirty days thereafter. Provided always that should the event giving rise to the claim of continuing effect, the Contractor shall submit an interim claim within the said thirty days and a final claim within thirty days of the end of the event giving rise to the claim.

25. Price Adjustment

25.1 The Project Manager shall adjust the Contract Price if taxes, duties and other levies are changed between the date 30 days before the submission of tenders for the Contract and the date of Completion. The adjustment shall be the change in the amount of tax payable by the Contractor.
25.2 The Contract Price shall be deemed to be based on exchange rates current at the
date of tender submission in calculating the cost to the Contractor of materials
to be specifically imported (by express provisions in the Contract Bills of
Quantities or Specifications) for permanent incorporation in the Works. Unless
otherwise stated in the Contract, if at any time during the period of the
Contract exchange rates shall be varied and this shall affect the cost to the
Contractor of such materials, then the Project Manager shall assess the net
difference in the cost of such materials. Any amount from time to time so
assessed shall be added to or deducted from the Contract Price, as the case
may be.

25.3 Unless otherwise stated in the Contract, the Contract Price shall be deemed to
have been calculated in the manner set out below and in sub- clauses 25.4 and
25.5 and shall be subject to adjustment in the events specified thereunder;

(i) The prices contained in the Contract Bills of Quantities shall be
deemed to be based upon the rates of wages and other
emoluments and expenses as determined by the Joint Building
Council of Kenya (J.B.C.) and set out in the schedule of basic rates
issued 30 days before the date for submission of tenders. A copy of
the schedule used by the Contractor in his pricing shall be attached in
the Appendix to Conditions of Contract.

(ii) Upon J.B.C. determining that any of the said rates of wages or other
emoluments and expenses are increased or decreased, then the Contract
Price shall be increased or decreased by the amount assessed by the
Project Manager based upon the difference, expressed as a percentage,
between the rate set out
in the schedule of basic rates issued 30 days before the date for
submission of tenders and the rate published by the J.B.C. and applied
to the quantum of labour incorporated within the amount of Work
remaining to be executed at the date of publication of such increase or
decrease.

(iii) No adjustment shall be made in respect of changes in the rates of
wages and other emoluments and expenses which occur after the date
of Completion except during such other period as may be granted as an
extension of time under clause 17.0 of these Conditions.

25.4 The prices contained in the Contract Bills of Quantities
shall be deemed to be based upon the basic prices of materials to be
permanently incorporated in the Works as determined by the J.B.C. and set out
in the schedule of basic rates issued 30 days before the date for submission of
tenders. A copy of the schedule used by the Contractor in his pricing shall be
attached in the Appendix to Conditions of Contract.

25.5 Upon the J.B.C. determining that any of the said basic prices are increased or
decreased then the Contract Price shall be increased or decreased by the
amount to be assessed by the Project Manager based upon the difference
between the price set out in the schedule of basic rates issued 30 days before
the date for submission of tenders and the rate published by the J.B.C. and applied to the quantum of the relevant materials which have not been taken into account in arriving at the amount of any interim certificate under clause 23 of these Conditions issued before the date of publication of such increase or decrease.

25.6 No adjustment shall be made in respect of changes in basic prices of materials which occur after the date for Completion except during such other period as may be granted as an extension of time under clause 17.0 of these Conditions.

25.7 The provisions of sub-clause 25.1 to 25.2 herein shall not apply in respect of any materials included in the schedule of basic rates.

26. Retention

26.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Appendix to Conditions of Contract until Completion of the whole of the Works. On Completion of the whole of the Works, half the total amount retained shall be repaid to the Contractor and the remaining half when the Defects Liability Period has passed and the Project Manager has certified that all defects notified to the Contractor before the end of this period have been corrected.

27. Liquidated Damages

27.1 The Contractor shall pay liquidated damages to the Employer at the rate stated in the Appendix to Conditions of Contract for each day that the actual Completion Date is later than the Intended Completion Date. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not alter the Contractor’s liabilities.

27.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rate specified in Clause 23.30.

28. Securities

28.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a reputable bank acceptable to the Employer, and denominated in Kenya Shillings. The Performance Security shall be valid until a date 30 days beyond the date of issue of the Certificate of completion.
29.1 If applicable, the Dayworks rates in the Contractor’s tender shall be used for small additional amounts of Work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

29.2 All work to be paid for as Dayworks shall be recorded by the Subcontractor on Forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the Work being done.

29.3 The Contractor shall be paid for Dayworks subject to obtaining Signed Dayworks forms.

30. Liability and Insurance

30.1 From the Start Date until the Defects Correction Certificate has been issued, the following are the Employer’s risks:

(a) The risk of personal injury, death or loss of or damage to property (excluding the Works, Plant, Materials and Equipment), which are due to;

(i) Use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works, or

(ii) Negligence, breach of statutory duty or interference with any legal right by the Employer or by any person employed by or Contracted to him except the Contractor.

(b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in Employer’s design, or due to war or radioactive contamination directly affecting the place where the Works are being executed.

30.2 From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is the Employer’s risk except loss or damage due to;

(a) A defect which existed on or before the Completion Date.

(b) An event occurring before the Completion Date, which was not itself the Employer’s risk

(c) The activities of the Contractor on the Site after the Completion date.

30.3 From the Start Date until the Defects Correction Certificate has been issued, the risks of personal injury, death and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer’s risk are Contractor’s risks.
The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts stated in the Appendix to Conditions of Contract for the following events:

(a) Loss of or damage to the Works, Plant, and Materials;
(b) Loss of or damage to Equipment;
(c) Loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract, and
(d) Personal injury or death.

30.4 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager’s approval before the Start Date. All such insurance shall provide for compensation required to rectify the loss or damage incurred.

30.5 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

30.6 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager. Both parties shall comply with any conditions of insurance policies.

31. **Completion and taking over**

31.1 Upon deciding that the Works are complete, the Contractor shall issue a written request to the Project Manager to issue a Certificate of Completion of the Works. The Employer shall take over the Site and the Works within seven [7] days of the Project Manager’s issuing a Certificate of Completion.

32. **Final Account**

32.1 The Contractor shall issue the Project Manager with a detailed account of the total amount that the Contractor considers payable to him by the Employer under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 30 days of receiving the Contractor’s account if it is correct and complete. If it is not, the Project Manager shall issue within 30 days a schedule that states the scope of the corrections or additions that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a Payment Certificate. The Employer shall pay the Contractor the amount due in the Final Certificate within 60 days.
33. **Termination**

33.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These fundamental breaches of Contract shall include, but shall not be limited to, the following:

(a) The Contractor stops work for 30 days when no stoppage of work is shown on the current program and the stoppage has not been authorised by the Project Manager;

(b) The Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;

(c) The Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

(d) A payment certified by the Project Manager is not paid by The Employer to the Contractor within 30 days (for Interim Certificate) or 60 days (for Final Certificate) of issue.

(e) The Project Manager gives notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;

(f) The Contractor does not maintain a security, which is required.

33.2 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under Clause 33.1 above, the Project Manager shall decide whether the breach is fundamental or not.

33.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.

33.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible. The Project Manager shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

34. **Payment upon Termination**

34.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the Work done and materials ordered and delivered to Site up to the date of the issue of the certificate. Additional liquidated damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable by the Contractor.

34.2 If the Contract is terminated for the Employer’s convenience
or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the Work done, materials ordered, the reasonable cost of removal of equipment, repatriation of the Contractor’s personnel employed solely on the Works, and the Contractor’s costs of protecting and securing the works.

34.3 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on the Site, plant, equipment and temporary works.

34.4 The Contractor shall, during the execution or after the completion of the Works under this clause remove from the Site as and when required, within such reasonable time as the Project Manager may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to or hired by him, and in default the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor. Until after completion of the Works under this clause the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts therefore the Project Manager shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

35. Release from Performance

35.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop Work as quickly as possible after receiving this certificate and shall be paid for all Work carried out before receiving it.

36. Corrupt gifts and payments of commission

The Contractor shall not:

(a) Offer or give or agree to give to any person in the service of the Employer any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for the Employer or for showing or forbearing to show favour or disfavour to any person in relation to this or any other Contract for the Employer.

(b) Enter into this or any other Contract with the Employer in
connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to the Employer.

Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the provisions of the Public Procurement Regulations issued under The Exchequer and Audit Act Cap 412 of the Laws of Kenya.

37. **Settlement of Disputes**

37.1 In case any dispute or difference shall arise between the Employer or the Project Manager on his behalf and the Contractor, either during the progress or after the completion or termination of the Works, such dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed by the Chairman or Vice Chairman of any of the following professional institutions;

(i) Architectural Association of Kenya

(ii) Institute of Quantity Surveyors of Kenya

(iii) Association of Consulting Engineers of Kenya

(iv) Chartered Institute of Arbitrators (Kenya Branch)

(v) Institution of Engineers of Kenya

On the request of the applying party. The institution written to first by the aggrieved party shall take precedence over all other institutions.

37.2 The arbitration may be on the construction of this Contract or on any matter or thing of whatsoever nature arising thereunder or in connection therewith, including any matter or thing left by this Contract to the discretion of the Project Manager, or the withholding by the Project Manager of any certificate to which the Contractor may claim to be entitled to or the measurement and valuation referred to in clause 23.0 of these conditions, or the rights and liabilities of the parties subsequent to the termination of Contract.

37.3 Provided that no arbitration proceedings shall be commenced on any dispute or difference where notice of a dispute or difference has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.
37.4 Notwithstanding the issue of a notice as stated above, the arbitration of such a dispute or difference shall not commence unless an attempt has in the first instance been made by the parties to settle such dispute or difference amicably with or without the assistance of third parties. Proof of such attempt shall be required.

37.5 Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the Works or abandonment of the Works or termination of the Contract by either party:

37.5.1 The appointment of a replacement Project Manager upon the said person ceasing to act.
37.5.2 Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
37.5.3 Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
37.5.4 Any dispute or difference arising in respect of war risks or war damage.

37.6 All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract, unless the Employer and the Contractor agree otherwise in writing.

37.7 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.

37.8 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.

37.9 The award of such Arbitrator shall be final and binding upon the parties.

38. Alternative Dispute Resolution

38.1 Pursuant to clause 37 of these Conditions of Contract, it shall be a condition that no dispute shall be referred to arbitration unless and until the matter has been dealt with through Alternative Dispute Resolution (ADR) mechanism.

38.2 The person or persons to conduct the Alternative Resolution shall be agreed upon between the parties.

38.3 The Alternative Dispute Resolution shall involve Reconciliation, Mediation or adjudication.
## SECTION VI - APPENDIX TO CONDITIONS OF CONTRACT

<table>
<thead>
<tr>
<th>The Project Manager Is</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: …………………………………………………………… Address: ……………………………………………………………</td>
<td></td>
</tr>
<tr>
<td>Facsimile: ……………………………………………………………</td>
<td></td>
</tr>
</tbody>
</table>

The name (and identification number) of the Contract - Supply, Installation, Testing and Commissioning Abattoir Processing Equipment for the Proposed Nasukuta Export Abattoir, WEST POKOT, Tender No CGWP/EU/T/034/2020-2021


TENDER No: CGWP/EU/T/034/2020-2021

Other Contractors, utilities etc. to be engaged by the Employer on the site include those for the execution of;

| Clause 8.1 |
|  |

The Start Date shall be AGREED WITH THE CLIENT

The Intended Completion Date for the whole of the Works shall be AGREED WITH THE CLIENT

The Contractor shall submit a program for the Works within 14 days of delivery of the Letter of Acceptance.

The period between Program updates is 14 days.

The amount to be withheld for late submission of an updated Program is WHOLE CERTIFICATE

The Site Possession Date shall be AGREED WITH THE CLIENT

The Site is located at …………………………………………………………..NASUKUTA

The Defects Liability period is 6 months.

Variations shall be in accordance with the Public Procurement and Asset Disposal Act (2015)

The payments shall be settled within 60 days from the date of receipt of the interim certificates by the Client

There shall be no payment on delayed payments

<p>| Clause 10 |
| Clause 13 |
| Clause 14 |
| Clause 20 |
| Clause 22 |
| Clause 23.1 |
| Clause 23.3 |</p>
<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>All payments shall be made in Kenya Shillings</td>
</tr>
<tr>
<td>There shall be no payment in advance</td>
</tr>
<tr>
<td>Not Applicable</td>
</tr>
<tr>
<td>The proportion of payments retained is 10 percent.</td>
</tr>
<tr>
<td>The liquidated damages for the whole of the Works is Kshs. ……………… per week or part thereof</td>
</tr>
<tr>
<td>The Performance Security shall be five percent (5%) of the Contract sum from a reputable bank recognized by the Central Bank of Kenya</td>
</tr>
<tr>
<td>The minimum insurance covers shall be:</td>
</tr>
<tr>
<td>1. The minimum cover for insurance of the Works and of Plant and Materials in respect of the Contractor’s liability is Contractors All Risk policy</td>
</tr>
<tr>
<td>2. The minimum cover for loss or damage to Equipment is NIL</td>
</tr>
<tr>
<td>3. Insurance to cover third party risks</td>
</tr>
<tr>
<td>4. The minimum for insurance of other property is KShs ………………</td>
</tr>
<tr>
<td>5. The minimum cover for personal injury or death insurance</td>
</tr>
<tr>
<td>The Completion Period for the Works is 30 days</td>
</tr>
<tr>
<td>The schedule of basic rates used in pricing by the Contractor is as attached [CONTRACTOR TO ATTACH].</td>
</tr>
<tr>
<td>Disputes to be settled as per the Arbitration Laws of Kenya</td>
</tr>
<tr>
<td>Any dispute arising out of the Contract that cannot be amicably resolved between the parties shall be referred to either party to the arbitration and a final decision by a panel of a person to be agreed between the parties. Failing agreement on the appointment of an Arbitrator, the Arbitrator shall be appointed by the chairperson of the Chartered Institute of Arbitrators – Kenya branch on the request of the applying party. The seat of arbitration shall be in Kenya.</td>
</tr>
</tbody>
</table>
SECTION VII: CONTRACT PRELIMINARIES AND GENERAL CONDITIONS

1.01 Examination of Tender Documents

The tenderer is required to check the number of pages of this document and should he find any missing or indistinct, he must inform the Engineer at once and have the same rectified.

All tenderers shall be deemed to have carefully examined the following: Work detailed in the Specification and in the Contract Drawings.

The Republic of Kenya Document “General Conditions of Contract for Electrical and Mechanical Works”.

Other documents to which reference is made.

He shall also be deemed to have included for any expenditure which may be incurred in conforming with the above items (a), (b), (c) and observe this expense as being attached to the contract placed for the whole or any part of the work.

The tenderer shall ensure that all ambiguities, doubts or obscure points of detail, are clarified with the Engineer before submission of his tender, as no claims for alleged deficiencies in the information given shall be considered after this date.

1.02 Discrepancies

The Contractor shall include all work either shown on the Contract Drawings or detailed in the specification. No claim or extra cost shall be considered for works which has been shown on the drawings or in the specification alone.

Should the drawing and the specification appear to conflict, the Contractor shall query the points at the time of tendering and satisfy himself that he has included for the work intended, as no claim for extra payment on this account shall be considered after the contract is awarded.

1.03 Conditions of Contract Agreement

The Contractor shall be required to enter into a contract with the Main Contractor.

The Conditions of the Contract between the Main Contractor and any Contractor as hereinafter defined shall be the latest edition of the Agreement and Schedule of Conditions of Kenya Association of Building and Civil Engineering Contractors as particularly modified and amended hereinafter. For the purpose of this contract the Agreement and Schedule of Conditions and any such modifications and amendments shall read and construed together. In any event of discrepancy the modifications and amendments shall prevail.
1.04 Payment

Payment shall be made through certificates to the Main Contractor. All payments shall be less retention as specified in the Main Contract. No payment shall become due until materials are delivered to site.

1.05 Definition of Terms

Throughout these contract documents units of measurements, terms and expressions are abbreviated and wherever used hereinafter and in all other documents they shall be interpreted as follows:

i) Employer: The term “Employer” shall mean THE COUNTY GOVERNMENT OF WEST POKOT
   P.O. BOX 222-30600
   KAPENGURIA

ii) Architect: The term “Architect” shall mean County Architect, West Pokot County

iii) Project Manager: The term Project Manager shall Mean:
    CHIEF OFFICER,
    DEPARTMENT OF PASTORAL ECONOMY,
    P.O. BOX 314- 30600
    KAPENGURIA.

iv) Quantity Surveyor: The term “Quantity Surveyor” shall mean
   County Quantity Surveyor, West Pokot County

v) Civil/Structural Engineers: The term “Civil/Structural Engineers” shall mean
   County Civil/Structural Engineer – West Pokot County

vi) Service Engineer: This Shall mean
   County Electrical / Mechanical Services Engineer – West Pokot County

vii) Main Contractor: The term “Main Contractor” shall mean the firm or company
   appointed to carry out the Building Works and shall include his or their heir,
   executors, assigns, administrators, successors, and duly appointed representatives.

Viii) Contractor: The term “Contractor” shall mean the Persons or person, firm or
   Company whose tender for this work has been accepted, and who has entered into a
   contract agreement with the Contractor for the execution of the Contract Works, and
   shall include his or their heirs, executors, administrators, assigns, successors and duly
   appointed representatives.

ix) Contract Works: The term “Contract Works” shall mean all or any
    portion of the work, materials and articles, whether the same are being manufactured or
    prepared, which are to be used in the execution of this Contract and whether the
    same may be on site or not.
x) **Contract Drawings:** The term “Contract Drawings” shall mean those drawings required or referred to herein and forming part of the Bills of Quantities.

xi) **Working Drawings:** The term “Working Drawings” shall mean those drawings required to be prepared by the Contractor as hereinafter described.

xii) **Record Drawings:** The term “Record Drawings” shall mean those drawings required to be prepared by the Contractor showing “as installed” and other records for the Contract Works.

xiii) **Abbreviations:**

CM shall mean Cubic Metre  
SM shall mean Square Metre  
LM shall mean Linear Metre  
LS shall mean Lump Sum  
mm shall mean Millimetres  
No. Shall mean Number  
Kg. shall mean Kilogramme  
KEBS or KS shall mean Kenya Bureau of Standards  
BS shall mean current British Standard Specification published by the British Standard Institution, 2 Park Street, London W1, England  
“Ditto” shall mean the whole of the preceding description in which it occurs. Where it occurs in description of succeeding item it shall mean the same as in the first description of the series in which it occurs except as qualified in the description concerned. Where it occurs in brackets it shall mean the whole of the preceding description which is contained within the appropriate brackets.

1.06 **Site Location**

The site of the Contract Works is situated at Nasukuta, WEST POKOT.

The tenderer is recommended to visit the site and shall be deemed to have satisfied himself with regard to access, possible conditions, the risk of injury or damage to property on/or adjacent to the site, and the conditions under which the Contract Works shall have to be carried out and no claims for extras shall be considered on account of lack of knowledge in this respect.

1.07 **Duration of Contract**

The Contractor shall be required to phase his work in accordance with the Main contractor’s programme (or its revision).

1.08 **Scope of Contract Works**

The Contractor shall supply, deliver, unload, hoist, fix, test, commission and hand-over in satisfactory working order the complete installations specified hereinafter and/or as shown on the Contract Drawings attached hereto, including the provision of labour, transport and plant for unloading material and storage, and handling into position and fixing, also the supply of ladders, scaffolding the other mechanical devices to plant, installation, painting, testing,
setting to work, the removal from site from time to time of all superfluous material and rubbish caused by the works.

1.09 Extent of the Contractor’s Duties

At the commencement of the works, the contractor shall investigate and report to the Engineer if all materials and equipment to be used in the work and not specified as supplied by the others are available locally. If these materials and equipment are not available locally, the contractor shall at this stage place orders for the materials in question and copy the orders to the Engineer. Failure to do so shall in no way relieve the contractor from supplying the specified materials and equipment in time.

Materials supplied by others for installation and/or connection by the Contractor shall be carefully examined in the presence of the supplier Before installation and connection. Any defects noted shall immediately be Reported to the Engineer.

The contractor shall be responsible for verifying all dimensions relative to his work by actual measurements taken on site.

The Contractor shall mark accurately on one set of drawings and Indicate all alterations and/or modifications carried out to the designed System during the construction period. This information must be made available on site for inspection by the Engineer.

1.10 Execution of the Works

The works shall be carried out strictly in accordance with:

a) All relevant Kenya Bureau of Standards Specifications.

b) All relevant British Standard Specifications and Codes of Practice (Hereinafter referred to B.S. and C.P. respectively).

c) General specifications of materials and works Section D of this document


e) The Bye-laws of the Local Authority.

f) The Architect’s and/or Engineer’s Instructions.

The Contract Drawings and Specifications are to be read and construed together.

1.11 Validity of Tender

The tender shall remain valid for acceptance within 120 days from the final date of submission of the tender, and this has to be confirmed by signing the Tender Bond. The tenderer shall be exempted from this Bond if the tender was previously withdrawn in writing to the Employer before the official opening.

1.12 Firm – Price Contract

Unless specifically stated in the documents or the invitation to tender, this is a firm-price Contract and the Contractor must allow in his tender for the increase in the cost of labour
and/or materials during the duration of the Contract. No claims shall be allowed for increased costs arising from the fluctuations in duties and/or day to day currency fluctuations.

1.13 Variation

No alteration to the Contract Works shall be carried out until receipt by the Contractor of written instructions from the Project Manager.

Any variation from the Contract price in respect of any extra work, alteration or omission requested or sanctioned by the Engineer shall be agreed and confirmed in writing at the same time such variations are decided and shall not affect the validity of the Contract. Schedule of Unit Rates shall be used to assess the value of such variations. No allowance shall be made for loss of profit on omitted works.

Where the Architect requires additional work to be performed, the Contractor, if he considers it necessary, shall give notice within seven (7) days to the Main Contractor of the length of time he (the Contractor) requires over and above that allotted for completion of the Contract.

If the Contractor fails to give such notice he shall be deemed responsible for the claims arising from the delay occasioned by reason of such extension of time.

1.14 Prime Cost and Provisional Sums

A specialist Contractor may be nominated by the Project Manager to supply and/or install any equipment covered by the Prime Cost or Provisional Sums contained within the Contract documents.

The work covered by Prime Cost and Provisional Sums may or may not be carried out at the discretion of the Project Manager.

The whole or any part of these sums utilised by the Contractor shall be deducted from the value of the Contract price when calculating the final account.

1.15 Bond

The tenderer must submit with his tender the name of one Surety who must be an established Bank only who shall be bound to the County Government of West Pokot for an amount equal to 7½ % of the Contract amount as Clause 28 of the Conditions of Contract.

1.16 Government Legislation and Regulations

The Contractor’s attention is called to the provision of the Factory Act 1972 and subsequent amendments and revisions, and allowance must be made in his tender for compliance therewith, in so far as they are applicable.

The Contractor must also make himself acquainted with current legislation and any Government regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc.
The Contractor shall allow for providing holidays and transport for work people, and for complying with Legislation, Regulations and Union Agreements.

1.17 Import Duty and Value Added Tax

The Contractor shall be required to pay full Import Duty and Value Added Tax on all items of equipment, fittings and plant, whether imported or locally manufactured. The tenderer shall make full allowance in his tender for all such taxes.

1.18 Insurance Company Fees

Attention is drawn to the tenderers to allow for all necessary fees, where known, that may be payable in respect of any fees imposed by Insurance Companies or statutory authorities for testing or inspection. No allowance shall be made to the contractor with respect to fees should these have been omitted by the tenderer due to his negligence in this respect.

1.19 Provision of Services by the Main Contractor

The main Contractor shall make the following facilities available to the Contractor:

b) The provision of temporary water, lighting and power: the Contractor pay for all these services utilized.

c) Fixing of anchorage and pipe supports in the shuttering, shall be supplied by the Contractor who shall also supply the Project Manager with fully dimensioned drawings detailing the exact locations.

d) i) Provision of scaffolding, cranes, etc. It shall be the Contractor’s responsibility to liaise with the Project Manager to ensure that there is maximum co-operation with other nominated Sub-contractors in the use of scaffolding, cranes, etc.

ii) Any specialist scaffolding, cranes, etc. by the Contractor for his own exclusive use shall be paid for by the Contractor.

1.20 Suppliers

The Contractor shall submit names of any supplier for the materials to be incorporated, to the Engineer for approval. The information regarding the names of the suppliers may be submitted at different times, as may be convenient, but no sources of supply shall be changed without prior approval.

Each supplier must be willing to admit the Engineer or his representative to his premises during working hours for the purpose of examining or obtaining samples of the materials in question.
1.21 Samples and Materials Generally

The Contractor shall, when required, provide for approval at no extra cost, samples of all materials to be incorporated in the works. Such samples, when approved, shall be retained by the Engineer and shall form the standard for all such materials incorporated.

1.22 Administrative Procedure and Contractual Responsibility

Wherever within the Specification it is mentioned or implied that the Contractor shall deal direct with the Employer or Engineer, it shall mean “through the Project Manager who is responsible to the Employer for the whole of the works including the Contract works

1.23 Bills of Quantities

The Bills of Quantities have been prepared in accordance with the standard method of measurement of Building Works for East Africa, first Edition, Metric, 1970. All the Quantities are based on the Contract Drawings and are provisional and they shall not be held to gauge or to limit the amount or description of the work to be executed by the Contractor but the value thereof shall be deducted from the Contract Sum and the value of the work ordered by the Engineer and executed thereunder shall be measured and valued by the Engineer in accordance with the conditions of the Contract.

All work liable to adjustment under this Contract shall be left uncovered for a reasonable time to allow measurements needed for such adjustment to be taken by the Quantity Surveyor or Engineer. Immediately the work is ready for measuring the Contractor shall give notice to the Quantity Surveyor or Engineer to carry out measurements before covering up. If the Contractor shall make default in these respects he shall, if the Engineer so directs, uncover the work to enable the necessary measurements to be taken and afterwards reinstate at his own expense

1.24 Contractor’s Office in Kenya

The Contractor shall maintain (after first establishing if necessary) in Kenya an office staffed with competent Engineer Manager and such supporting technical and clerical staff as necessary to control and coordinate the execution and completion of the Contract Works.

The Engineer Manager and his staff shall be empowered by the Contractor to represent him at meetings and in discussions with the Project Manager, the Engineer and other parties who may be concerned and any liaison with the Contractor’s Head Office on matters relating to the design, execution and completion of the Contract Works shall be effected through his office in Kenya.

It shall be the Contractor’s responsibility to procure work permits, entry permits, licences, registration, etc., in respect of all expatriate staff.

The Contractor shall prepare a substantial proportion of his Working Drawings at his office in Kenya. No reasons for delays in the preparation or submission for approval or otherwise of such drawings or proposals shall be accepted on the grounds that the Contractor’s Head Office is remote from his office in Nairobi or the site of the Contract Works or otherwise.
1.25 Builder’s Work

All chasing, cutting away and making good shall be done by the Contractor. The Contractor shall mark out in advance and shall be responsible for accuracy of the size and position of all holes and chases required.

The Contractor shall drill and plug holes in floors, walls, ceiling and roof for securing services and equipment requiring screw or bolt fixings.

Any purpose made fixing brackets shall be provided and installed by the Contractor.

1.26 Structural Provision for the Works

Preliminary major structural provision has been made for the Contract Works based on outline information ascertained during the preparation of the Specification.

The preliminary major structural provision made shall be deemed as adequate unless the Contractor stated otherwise when submitting his tender.

Any major structural provision or alteration to major structural provisions required by the Contractor shall be shown on Working Drawings to be submitted to the Engineer within 30 days of being appointed.

No requests for alterations to preliminary major structural provisions shall be approved except where they are considered unavoidable by the Engineer. In no case shall they be approved if building work is so far advanced as to cause additional costs or delays in the works.

1.27 Position of Services, Plant, Equipment, Fittings and Apparatus

The Contract Drawings give a general indication of the intended layout. The position of the equipment and apparatus shall be confirmed before installation is commenced. The exact siting of appliances may vary from that indicated.

The routes of services and pipework will be by others.

1.28 Checking of Work

The Contractor shall satisfy himself to the correctness of the connections he makes to all items of equipment supplied under the Contract agreement and equipment supplied under other contracts before it is put into operation. Details of operation, working pressures, temperatures, voltages, phases, power rating, etc., shall be confirmed to others and confirmation received before the system is first operated.

1.29 Setting to Work and Regulating System

The Contractor shall carry out such tests of the Contract Works as required by British Standard Specifications, or equal and approved codes as specified hereinafter and as customary.
No testing or commissioning shall be undertaken except in the presence of and to the satisfaction of the Engineer unless otherwise stated by him (Contractor’s own preliminary and proving tests excepted).

It shall be deemed that the Contractor has included in the Contract Sum for the costs of all fuel, power, water and the like, for testing and commissioning as required as part of the Contract Works. He shall submit for approval to the Engineer a suitable programme for testing and commissioning. The Engineer and Employer shall be given ample warning in writing, as to the date on which testing and commissioning shall take place.

The Contractor shall commission the Contract Works and provide attendance during the commissioning of all services, plant and apparatus connected under the Contract Agreement or other Contract Agreements, related to the project.

Each system shall be properly balanced, graded and regulated to ensure that correct distribution is achieved and where existing installations are affected, the Contractor shall also regulate these systems to ensure that their performance is maintained.

The proving of any system of plant or equipment as to compliance with the Specification shall not be approved by the Engineer, except at his discretion, until tests have been carried out under operating conditions pertaining to the most onerous conditions specified except where the time taken to obtain such conditions is unreasonable or exceeds 12 months after practical completion of the Contract Works.

1.30 Identification of Plant Components

The Contractor shall supply and fix identification labels to all plant, starters, switches and items of control equipment including valves, with white traffolyte or equal labels engraved in red lettering, denoting its name, function and section controlled. The labels shall be mounted on equipment and in the most convenient positions. Care shall be taken to ensure the labels can be read without difficulty. This requirement shall apply also to major components of items of control equipment.
Details of the lettering of the labels and the method of mounting or supporting shall be forwarded to the Engineer for approval prior to manufacture.

1.31 Contract Drawings

The Contract Drawings when read in conjunction with the text of the Specification, have been completed in such detail as was considered necessary to enable competitive tenders to be obtained for the execution and completion of the Contract works.

The Contract Drawings are not intended to be Working Drawings and shall not be used unless exceptionally they are released for this purpose.

1.32 Working Drawings

The Contractor shall prepare such Working Drawings as may be necessary. The Working Drawings shall be complete in such detail not only that the Contract Works can be executed on site but also that the Engineer can approve the Contractor’s proposals, detailed designs and intentions in the execution of the Contract Works.

If the Contractor requires any further instructions, details, Contract Drawings or information drawings to enable him to prepare his Working Drawings or proposals, the Contractor shall accept at his own cost, the risk that any work, commenced or which he intends to commence at site may be rejected.

The Engineer, in giving his approval to the Working Drawings, shall presume that any necessary action has been, or shall be taken by the Contractor to ensure that the installations shown on the Working Drawings have been cleared with the Project Manager and any other Contractors whose installations and works might be affected.

If the Contractor submits his Working Drawings to the Engineer without first liaising and obtaining clearance for his installations from the Project Manager and other Contractors whose installations and works might be affected, then he shall be liable to pay for any alterations or modification to his own, or other Contractor’s installations and works, which are incurred, notwithstanding any technical or other approval received from the Engineer.

Working Drawings to be prepared by the Contractor shall include but not be restricted to the following: Any drawings required by the Engineer to enable structural provisions to be made including Builder’s Working Drawings or Schedules and those for the detailing of holes, fixings, foundations, cables and paperwork ducting below or above ground or in or outside or below buildings.

General Arrangement Drawings of all plant, control boards, fittings and apparatus or any part thereof and of installation layout arrangement of such plant and apparatus.

Schematic Layout Drawings of services and of control equipment shall be made by others but the contractor shall indicate where the services are to be connected on his equipment.
Layout Drawings of all embedded and non-embedded pipework, ducts and electrical conduits.

Complete circuit drawings of the equipment, together with associated circuit description.

Such other drawings as are called for in the text of the Specification or Schedules or as the Engineer may reasonably require.

Three copies of all Working Drawings shall be submitted to the Engineer for approval. One copy of the Working Drawings submitted to the Engineer for approval shall be returned to the Contractor indicating approval or amendment therein.

Six copies of the approved Working Drawings shall be given to the Project Manager by the Sub-contractor for information and distribution to other Contractors carrying out work associated with or in close proximity to or which might be affected by the Contract Works.

Approved Working Drawings shall not be departed from except as may be approved or directed by the Engineer.

Approval by the Engineer of Working Drawings shall neither relieve the Contractor of any of his obligations under the Contract nor relieve him from correcting any errors found subsequently in the Approved Working Drawings or other Working Drawings and in the Contract Works on site or elsewhere associated therewith.

The Contractor shall ensure that the Working Drawings are submitted to the Engineer for approval at a time not unreasonably close to the date when such approval is required. Late submission of Working Drawings shall not relieve the Contractor of his obligation to complete the Contract Works within the agreed Contract Period and in a manner that would receive the approval of the Engineer.

1.33 Record Drawings (As Installed) and Instructions

During the execution of the Contract Works the Contractor shall, in a manner approved by the Engineer record on Working or other Drawings at site all information necessary for preparing Record Drawings of the installed Contract Works. Marked-up Working or other Drawings and other documents shall be made available to the Engineer as he may require for inspection and checking.

Record Drawings, may, subject to the approval of the Engineer, include approved Working Drawings adjusted as necessary and certified by the Contractor as a correct record of the installation of the Contract Works.

They shall include but not restricted to the following drawings or information: Working Drawings amended as necessary but titled “Record Drawings” and certified as a true record of the “As Installed” Contract Works. Subject to the approval of the Engineer such Working Drawings as may be inappropriate may be omitted.

Fully dimensioned drawings of all plant and apparatus.
General arrangement drawings of equipment, other areas containing plant forming part of the Contract Works and the like, indicating the accurate size and location of the plant and apparatus suitability cross-referenced to the drawings mentioned in (b) above and hereinafter.

Routes, types, sizes and arrangement of all pipework and ductwork including dates of installation of underground pipework.

Relay adjustment charts and manuals.

Routes, types, sizes and arrangement of all electric cables, conduits, ducts and wiring including the dates of installation of buried works.

System schematic and trunking diagrams showing all salient information relating to control and instrumentation.

**Grading Charts.**

Valve schedules and locations suitability cross-referenced. Wiring and piping diagrams of plant and apparatus.

Schematic diagrams of individual plant, apparatus and switch and control boards. These diagrams to include those peculiar to individual plant or apparatus and also those applicable to system operation as a whole.

**Operating Instruction**

Schematic and wiring diagrams shall not be manufacturer’s multipurpose general issue drawings. They shall be prepared specially for the Contract Works and shall contain no spurious or irrelevant information.

Marked-up drawings of the installation of the Contract Works shall be kept to date and completed by the date of practical or section completion. Two copies of the Record Drawings of Contract Works and two sets of the relay adjustment and grading charts and schematic diagrams on stiff backing shall be provided not later than one month later.

The Contractor shall supply for fixing in sub-stations, switch-rooms, boiler houses, plant rooms, pump houses, the office of the Maintenance Engineer and other places, suitable valve and instructions charts, schematic diagrams of instrumentation and of the electrical reticulation as may be requested by the Engineer providing that the charts, diagrams, etc., relate to installations forming part of the Contract Works. All such charts and diagrams shall be of suitable plastic material on a stiff backing and must be approved by the Engineer before final printing.

Notwithstanding the Contractor’s obligations referred to above, if the Contractor fails to produce to the Engineer’s approval, either:-

The Marked-up Drawings during the execution of the Contract Works or
The Record Drawings, etc., within one month of the Section or Practical Completion

The Engineer shall have these drawings produced by others. The cost of obtaining the necessary information and preparing such drawings, etc., shall be recovered from the Contractor.

1.34 Maintenance Manual

Upon Practical Completion of the Contract Works, the Contractor shall furnish the Engineer four copies of a Maintenance Manual relating to the installation forming part of all of the Contract Works.

The manual shall be loose-leaf type, International A4 size with stiff covers and cloth bound. It may be in several volumes and shall be sub-divided into sections, each section covering one engineering service system. It shall have a ready means of reference and a detailed index.

The manual shall contain full operating and maintenance instructions for each item of equipment, plant and apparatus set out in a form dealing systematically with each system. It shall include as may be applicable to the Contract Works the following and any other items listed in the text of the Specifications:

System Description - Plant


Schematic and Writing Diagrams of Plant and Apparatus Record Drawings, true to scale, folded to International A4 size Lists of Primary and Secondary Spares.

The manual is to be specially prepared for the Contract Works and manufacturer’s standard descriptive literature and plant operating instruction cards shall not be accepted for inclusion unless exceptionally approved by the Engineer. The Contractor shall, however, affix such cards, if suitable, adjacent to plant and apparatus. One spare set of all such cards shall be furnished to the Engineer.

1.35 Hand-over

The Contract Works shall be considered complete and the Maintenance and Defects Liability Period shall commence only when the Contract Works and supporting services have been tested, commissioned and operated to the satisfaction of the Engineer and officially approved and accepted by the Employer.

The procedure to be followed shall be as follows:

On the completion of the Contract Works to the satisfaction of the Engineer and the Employer, the Contractor shall request the Engineer, at site to arrange for handing over. The Engineer shall arrange a Hand-over Meeting or a series thereof, at site.
The Contractor shall arrange with the Engineer and Employer for a complete demonstration of each and every service to be carried out and for instruction to be given to the relevant operation staff and other representatives of the Employer.

In the presence of the Employer and the Engineer, Hand-over shall take place, subject to Agreement of the Hand-over Certificates and associated check lists.

### 1.36 Painting

It shall be deemed that the Contractor allowed for all protective and finish painting in the Contract Sum for the Contract Works, including colour coding of service pipework to the approval of the Engineer. Any special requirements are described in the text of the Specifications.

### 1.37 Spares

The Contractor shall supply and deliver such spares suitably protected and boxed to the Engineer’s approval as are called for in the Specifications or in the Price Schedules.

### 1.38 Testing and Inspection – Manufactured Plant

The Engineer reserves the right to inspect and test or witness of all manufactured plant equipment and materials.

The right of the Engineer relating to the inspection, examination and testing of plant during manufacture shall be applicable to Insurance companies and inspection authorities so nominated by the Engineer.

The Contractor shall give two weeks’ notice to the Engineer of his intention to carry out any inspection or tests and the Engineer or his representative shall be entitled to witness such tests and inspections.

Six copies of all test certificates and performance curves shall be submitted as soon as possible after the completion of such tests, to the Engineer for his approval.

Plant or equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Contractor’s own risk and should the test certificate not be approved new tests may be ordered by the Engineer at the Contractor’s expense. The foregoing provisions relate to tests at manufacturer’s works and as appropriate to those carried out at site.

### 1.39 Testing and Inspection -Installation

Allow for testing each section of the Contract Works installation as described hereinafter to the satisfaction of the Engineer.

### 1.40 Labour Camps

The Contractor shall provide the necessary temporary workshop and mess-room in position to be approved by the County Architect.
The work people employed by the Contractor shall occupy or be about only that part of
the site necessary for the performance of the work and the Contractor shall instruct his employees
accordingly.

If practicable, W.C. accommodation shall be allocated for the sole use of the Contractor’s
workmen and the Contractor shall be required to keep the same clean and disinfected, to make
good any damage thereto and leave in good condition.

1.41 Storage of Materials

The Contractor shall provide storerooms and workshop where required. He shall also provide
space for storage to nominated Contractors who shall be responsible for these lock-up
shades or stores provided. Nominated Contractors are to be made liable for the cost of any
storage accommodation provided specially for their use. No materials shall be stored or stacked
on suspended slabs without the prior approval of the Project manager.

1.42 Initial Maintenance

The Contractor shall make routine maintenance once a month during the liability for the Defects
Period and shall carry out all necessary adjustments and repairs, cleaning and oiling of moving
parts. A monthly report of the inspection and any works done upon the installation shall be
supplied to the Engineer.

The Contractor shall also provide a 24 -hour break-down service to attend to faults on or
malfunctioning of the installation between the routine visits of inspection.

The Contractor shall allow in the Contract Sum of the initial maintenance, inspection and break-
down service and shall provide for all tools, instruments, plant and scaffolding and the
transportation thereof, as required for the correct and full execution of these obligations and the
provision, use or installation of all materials as oils, greases, sandpaper, etc., or parts which are
periodically renewed such as brake linings etc., or parts which are faulty for any reason
whatsoever excepting always Acts of God such as storm, tempest, flood, earthquake and civil
revolt, acts of war and vandalism.

1.43 Maintenance and Servicing After Completion of the Initial Maintenance

The Contractor shall, if required, enter into a maintenance and service agreement with the
employer for the installation for a period of up to five years from the day following the last day of
the liability for Defects Period which offers the same facilities as specified in Clause 1.41 (Initial
Maintenance).

The terms of any such agreement shall not be less beneficial to the employer than the
terms of Agreements for either similar installation.

The Contractor shall submit with his tender for the works, where called upon a firm quotation for
the maintenance and service of the installation as specified herein, which shall be based upon the
present day costs and may be varied only to take into account increases in material and labour unit
rate costs between the time of tendering and the signing of the formal maintenance and service
agreement and which shall remain valid and open for acceptance by the Employer to and
including the last day of the fifth complete calendar month following the end of the liability for Defects Period.

1.44 Trade Names

Where trade names of manufacturer’s catalogue numbers are mentioned in the Specification or the Bills of Quantities, the reference is intended as a guide to the type of article or quality of material required. Alternate brands of equal and approved quality shall be acceptable.

1.45 Water and Electricity for the Works

These shall be made available by the Contractor who shall be liable for the cost of any water or electric current used and for any installation provided especially for his own use.

1.46 Protection

The Contractor shall adequately cover up and protect his own work to prevent injury and also to cover up and protect from damage all parts of the building or premises where work is performed by him under the Contract.

1.47 Defects after Completion

The defects liability period shall be 6 months from the date of practical completion of the Works in the Contract and certified by the Engineer.

1.48 Damages for Delay

Liquidated and Ascertained damages as stated in the Contract Agreement shall be claimed against the Contract for any unauthorized delay in completion. The Contractor shall be held liable for the whole or a portion of these damages should he cause delay in completion.

1.49 Clear Away on Completion

The Contractor shall, upon completion of the works, at his own expense, remove and clear away all plant, equipment, rubbish and unused materials, and shall leave the whole of the works in a clean and tidy state, to the satisfaction of the Engineer. On completion, the whole of the works shall be delivered up clean, complete and perfect in every respect to the satisfaction of the Engineer.

1.50 Final Account

On completion of the works the Contractor shall agree with the Engineer the value of any variations outstanding and as soon as possible thereafter submit to the Engineer his final statement of account showing the total sum claimed sub-divided as follows:

Statement A - detailing the tender amounts less the Prime Cost and Provisional Sums, included therein.

Statement B - detailing all the variation orders issued on the contract.
Statement C - Summarizing statement A and B giving the net grand total due to the Contractor for the execution of the Contract.

1.51 Fair Wages

The Contractor shall in respect of all persons employed anywhere by him in the execution of the Contract, in every factory, workshop or place occupied or used by him for execution of the Contract, observe and fulfil the following conditions:

The Contractor shall pay rates of the wages and observe hours and conditions of labour not less favourable than those established for the trade or industry in the district where work is carried out.

In the absence of any rates of wages, hours or conditions of labour so established the Contractor shall pay rates and observe hours and conditions of labour are not less favourable than the general level of wages, hours and conditions observed by other employers whose general circumstances in the trade or industry in which the Contractor is engaged are similar.

1.52 Supervision

During the progress of the works, the Contractor shall provide and keep constantly available for consultation on site an experienced English-speaking Supervisor and shall provide reasonable office facilities, attendance, etc., for the Supervisor.

In addition, during the whole of the time the works are under construction, the Contractor shall maintain on site one experienced foreman or charge-hand and an adequate number of fitters, etc., for the work covered by the Specification. The number of this staff shall not be reduced without the prior written approval of the Project manager or Engineer. Any instructions given to the Supervisor on site shall be deemed to have been given to the Contractor.

One copy of this Specification and one copy of each of the Contract Drawings (latest issue) must be retained on site at all times, and available for reference by the Engineer or Contractor.

1.53 Test Certificates

The Contractor shall provide the Engineer with three copies of all test reports or certificates that are or may be required by this Specification.

1.54 Labour

The Contractor shall provide skilled and unskilled labour as may be necessary for completion of the Contract.

1.55 Discount to the Main Contractor

No discount to any Contractor shall be included in the tender for this installation.

1.56 Guarantee

The whole of the work shall be guaranteed for a period of six months from the date of the Engineer’s certification of completion and under such guarantee the Contractor shall remedy at his
expense all defects in materials and apparatus due to faulty design, construction or workmanship which may develop in that period.

1.57 Direct Contracts

Notwithstanding the foregoing conditions, the University reserves the right to place a “Direct Contract” for any goods or services required in the works which are covered by a P.C Sum in the Bills of Quantities and to pay for the same direct. In any such instance, profit relative to the P.C Sum in the priced Bills of Quantities shall be adjusted as deserved for P.C Sum allowed.

1.58 Attendance Upon the Tradesmen etc

The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for the use of ordinary scaffolding. The Contractor however, shall not be required to erect any special scaffolding for them.

1.59 Trade Unions

The Contractor shall recognize the freedom of his work people to be members of trade unions.

1.60 Local and other Authorities notices and fees

The Contractor shall comply with and give all notices required by any Regulations, Act or by Law of any Local Authority or of any Public Service, Company or Authority who have any jurisdiction with regard to the works or with those systems the same are or shall be connected and he shall pay and indemnify the University against any fees or charges legally demandable under any regulation or by-law in respect of the works; provided that the said fees and charges if not expressly included in the contract sum or stated by way of provisional sum shall be added to the Contract sum.

The Contractor before making any variation from the contract drawings or specification necessitated by such compliance shall give the Project Manager written notice specifying and giving the reason for such variation and applying for instructions in reference thereto.

If the Contractor within seven days of having applied for the same does not receive such instructions, he shall proceed with the works in conforming to the provision regulation or by-law in question and any variation thereby necessitated shall be deemed to be a variation in accordance to the conditions of contract.

1.61 Assignment or subletting

The Contractor shall not without the written consent of the Project Manager assign this Contract or sublet any portion of the works, provided that such consent shall not be unreasonably withheld to the prejudice of the contractor.

1.62 Partial Completion

If the Government shall take over any part or parts works, apparatus, equipment etc. then within seven days from the date on which the University shall have taken possession of the relevant part, the Project Manager shall issue a Certificate stating his estimate of the approximate total value of the works which shall be the total value of that part and practical completion of the relevant part
shall be deemed to have occurred, and the Defects Liability Period in respect of the relevant part be deemed to have commenced on the date Government shall have taken possession thereof.

The Contractor shall make good any defects or other faults in the relevant part that had been deemed complete. The Contractor shall reduce the value of insurance by the full value of the relevant part. The Contractor shall be paid for the part of works taken possession by the University.

1.63 Temporary Works

Where temporal works shall be deemed necessary, such as Temporary lighting, the Contractor shall take precaution to prevent damage to such works.

The Contractor shall include for the cost of and make necessary arrangements with the Project Manager for such temporary works. For temporary lighting, electricity shall be metered and paid for by the Contractor.

1.64 Patent Rights

The Contractor shall fully indemnify the Government of Kenya; against any action, claim or proceeding relating to infringement of any patent or design rights, and pay any royalties which may be payable in respect of any article or any part thereof, which shall have been supplied by the Contractor to the Project Manager. In like manner the Government of Kenya shall fully indemnify the Contractor against any such action, claim or proceedings for infringement under the works, the design thereof of which shall have been supplied by the Project Manager to the Contractor, but this indemnify shall apply to the works only, and any permission or request to manufacture to the order of the Project Manager shall not relieve the Contractor from liability should he manufacture for supply to other buyers.

1.65 Mobilization and Demobilization

The Contractor shall mobilize labour plant and equipment to site according to his programme and schedule of work. He shall ensure optimum presence and utilization of labour, plant and equipment. He should not pay and maintain unnecessary labour force or maintain and service idle plant and equipment. Where necessary he shall demobilize and mobilize the labour, plant and equipment, as he deems fit to ensure optimum progress of the works and this shall be considered to be a continuous process as works progress. He shall make provision for this item in his tender. No claim shall be entertained where the contractor has not made any provision for mobilization and demobilization of labour, plant and equipment in the preliminary bills of quantities or elsewhere in this tender.

1.66 Extended Preliminaries

Where it shall be necessary to extend the contract period by the Project manager the Contractor shall still ensure availability on site, optimum labour, materials, plant and equipment. The Contractor shall make provision for extended preliminaries, should the contract period be extended and this shall be in a form of a percentage of the total Contractor works. Where called upon in the Appendix to these Preliminaries the Contractor shall insert his percentage per month for extended preliminaries that shall form basis for compensation. Lack of inserting the percentage shall mean that the Contractor has provided for this requirement elsewhere in the Bills of Quantities.
1.67 Supervision by Engineer and Site Meetings

A competent Project Engineer appointed by the Engineer as his representative shall supervise the Contract works. The Project Engineer shall be responsible for issuing all the site instructions in any variations to the works and these shall be delivered through the Contractor with the authority of the Project Manager. Any instructions given verbal shall be confirmed in writing.

The project engineer and (or) the Engineer shall attend management meetings arranged by the Project Manager and for which the Contractor or his representative shall also attend. For the purpose of supervising the project, provisional sums are provided to cover for transport and allowances. The Contractor shall in his tender allow for the provision of management meetings and site inspections, as instructed by the Engineer, and also profit and attendance on these funds. The funds shall be expended according to Project Manager’s instructions to the Contractor.

1.68 Amendment to Scope of Contract Works

No amendment to scope of Contract works is expected and in case of amendment or modification to scope of work, these shall be communicated to all tenderers in sufficient time before the deadline of the tender submission. However during the Contract period and as the works progress the Project Manager may vary the works as per conditions of Contract by issuing site instructions.

No claims shall be entertained on account of variation to scope of works either to increase the works (Pre-financing) or reduction of works (loss of profit-see clause 1.70)

1.69 Contractor Obligation and Employers Obligation

The Contractor shall finance all activities as part of his obligation to this Contract. The employer shall pay interim payment for materials and work completed on site as his obligation in this Contract, as the works progresses. No claims shall be entertained for pre-financing of the project by the Contractor, or for loss of profit (expectation loss) in case of premature termination, reduction or increase of works as the Contractor shall be deemed to have taken adequate measures in programming his works and expenditure and taken necessary financial precaution while executing the works. No interest shall be payable to the Contractor, except as relates to late payment as in the conditions of contract clause 23.3. The Contractor shall where called upon, insert his price to compensate for any of the occurrence stated here (premature termination, reduction or increase of works), as a percentage of the Contract sum in the Appendix to this section.
SECTION VIII - APPENDIX TO CONTRACT PRELIMINARIES AND GENERAL CONDITIONS

1. ADD TO CLAUSE 1.40

There are no labour camps.

2. ADD TO CLAUSE 1.17

Prices quoted shall include 16% VAT. In accordance with Government policy, 3% Withholding Tax shall be deducted from all payments made to the Contractor, and the same shall subsequently be forwarded to the Kenya Revenue Authority (KRA).

3. ADD TO CLAUSE 1.66

The amount or percentage that may be inserted in the bills of quantities for this item should not exceed the anticipated Liquidated damages amount for the same period.
SECTION IX: SPECIFICATIONS

PART A – GENERAL MECHANICAL SPECIFICATIONS

1.01 General

This section specifies the general requirement for plant, equipment and materials forming part of the Contract Works and shall apply except where specifically stated elsewhere in the Specification or on the Contract Drawings.

1.02 Quality of Materials

All plant, equipment and materials supplied as part of the Contract Works shall be new and of first class commercial quality, shall be free from defects and imperfections and where indicated shall be of grades and classifications designated herein.

All products or materials not manufactured by the Contractor shall be products of reputable manufacturers and so far as the provisions of the Specification is concerned shall be as if they had been manufactured by the Contractor.

Materials and apparatus required for the complete installation as called for by the Specification and Contract Drawings shall be supplied by the Contractor unless mention is made otherwise.

Materials and apparatus supplied by others for installation and connection by the Contractor shall be carefully examined on receipt. Should any defects be noted, the Contractor shall immediately notify the Engineer.

Defective equipment or that damaged in the course of installation or tests shall be replaced as required to the approval of the Engineer.

1.03 Regulations and Standards

The Contract Works shall comply with the current editions of the following:

a) The Kenya Government Regulations.

b) Cap 356 of Meat Control Regulation, Kenya.

c) The United Kingdom Chartered Institute of Building Services Engineers (CIBSE) Guides.

d) British Standard and Codes of Practice as published by the British
Standards Institution (BSI)

e) The County Government By-laws.
f) The Electricity Supply Authority By-laws.
g) KEBS – Basic Requirements for slaughterhouse and specifications, edition 2017


1.04 Electrical Requirements

Plant and equipment supplied under this Contract shall be complete with all necessary motor starters, control boards, and other control apparatus. Where control panels incorporating several starters are supplied they shall be complete with a main isolator.

The supply power up to and including local isolators shall be provided and installed by the Electrical Contractor. All other wiring and connections to equipment shall form part of this Contract and be the responsibility of the Contractor.

The Contractor shall supply three copies of all schematic, cabling and wiring diagrams for the Engineer’s approval.

The starting current of all electric motors and equipment shall not exceed the maximum permissible starting currents described in the Kenya Power and Lighting Company (KPLC) By-laws.

All electrical plant and equipment supplied by the Contractor shall be rated for the supply voltage and frequency obtained in Kenya, that is 415 Volts, 50Hz, 3-Phase or 240Volts, 50Hz, 1-phase.

Any equipment that is not rated for the above voltages and frequencies shall be rejected by the Engineer.

1.05 Transport and Storage

All plant and equipment shall, during transportation be suitably packed, crated and protected to minimize the possibility of damage and to prevent corrosion or other deterioration. On arrival at site all plant and equipment shall be examined and any damage to parts and protective priming coats made good before storage or installation.

Adequate measures shall be taken by the Contractor to ensure that plant and equipment do not suffer any deterioration during storage.
Prior to installation all piping and equipment shall be thoroughly cleaned. If, in the opinion of the Engineer any equipment has deteriorated or been damaged to such an extent that it is not suitable for installation, the Contractor shall replace this equipment at his own cost.

1.06 Site Supervision

The Contractor shall ensure that there is an English-speaking supervisor on the site at all times during normal working hours.

1.07 Installation

Installation of all special plant and equipment shall be carried out by the Contractor under adequate supervision from skilled staff provided by the plant and equipment manufacturer or his appointed agent in accordance with the best standards of modern practice and to the relevant regulations and standards described under Clause 2.03 of this Section.

1.08 Testing

1.08.1 General

The Contractor’s attention is drawn to Part ‘C’ Clause 1.38 of the “Preliminaries and General Conditions”.

1.08.2 Material Tests

All material for plant and equipment to be installed under this Contract shall be tested, unless otherwise directed, in accordance with the relevant B.S Specification concerned.

For materials where no B.S. Specification exists, tests are to be made in accordance with the best modern commercial methods to the approval of the Engineer, having regard to the particular type of the materials concerned.

The Contractor shall prepare specimens and performance tests and analyses to demonstrate conformance of the various materials with the applicable standards.

If stock material, which has not been specially manufactured for the plant and equipment specified is used, then the Contractor shall submit satisfactory evidence to the Engineer that such materials conform to the requirements stated herein in which case tests of material may be partially or completely waived.

Certified mill test reports of plates, piping and other materials shall be deemed acceptable.

1.08.3 Manufactured Plant and Equipment – Work Tests

The rights of the Engineer relating to the inspection, examination and testing of plant and equipment during manufacture shall be applicable to the Insurance Companies or Inspection Authorities so nominated by the Engineer.

The Contractor shall give two weeks’ notice to the Engineer of the manufacturer’s intention to carry out such tests and inspections.
The Engineer or his representative shall be entitled to witness such tests and inspections. The cost of such tests and inspections shall be borne by the Contractor.

Six copies of all test and inspection certificates and performance graphs shall be submitted to the Engineer for his approval as soon as possible after the completion of such tests and inspections.

Plant and equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Contractor’s own risk and should the test and inspection certificates not be approved, new tests may be ordered by the Engineer at the Contractor’s expense.

1.08.4 Pressure Testing

All pipework installations shall be pressure tested in accordance with the requirements of the various sections of this Specification. The installations may be tested in sections to suit the progress of the works but all tests must be carried out before the work is buried or concealed behind building finishes. All tests must be witnessed by the Engineer or his representative and the Contractor shall give 48 hours notice to the Engineer of his intention to carry out such tests.

Any pipework that is buried or concealed before witnessed pressure tests have been carried out shall be exposed at the expense of the Contractor and the specified tests shall then be applied.

The Contractor shall prepare test certificates for signature by the Engineer and shall keep a progressive and up-to-date record of the section of the work that has been tested.

1.09 Colour Coding

Unless stated otherwise in the Particular Specification all pipework shall be colour coded in accordance with the latest edition of B.S 1710 and to the approval of the Engineer or Architect.

1.10 Welding

1.10.1 Preparation

Joints to be made by welding shall be accurately cut to size with edges sheared, flame cut or machined to suit the required type of joint. The prepared surface shall be free from all visible defects such as lamination, surface imperfection due to shearing or flame cutting operation, etc., and shall be free from rust scale, grease and other foreign matter.

1.10.2 Method

All welding shall be carried out by the electric arc processing using covered electrodes in accordance with B.S. 639.
Gas welding may be employed in certain circumstances provided that prior approval is obtained from the Engineer.

1.10.3 Welding Code and Construction

All welded joints shall be carried out in accordance with the following Specifications:

**Pipe Welding**

All pipe welds shall be carried out in accordance with the requirements of B.S.806.

**General Welding**

All welding of mild steel components other than pipework shall comply with the general requirements of B.S. 1856.

**Welders Qualifications**

Any welder employed on this Contractor shall have passed the trade tests as laid down by the Government of Kenya. The Engineer may require to see the appropriate certificate obtained by any welder and should it be proved that the welder does not have the necessary qualifications the Engineer may instruct the Sub-contractor to replace him by a qualified welder.
PART B - GENERAL TECHNICAL SPECIFICATION

GENERAL

1. ABATTOIR CAPACITIES AND DESIGN

The initial capacities of the abattoir have been determined by the client with provision to be able to expand the abattoir capacity by adding to the chillers and lairages without change to, or interference with the dressing floor operations while the extensions are undertaken.

The abattoir has been determined to be Category A in the manner prescribed by Cap 356 Meat Control (Local Slaughter House) Regulations, 2010, Rev. 2012, namely that the acreage is used to determine the official Grading size of the abattoir.

It should be noted that the Client has agreed to permit the loadout of ‘Warm’ carcasses in the early years of the abattoirs operation and provision has been made to accommodate this. In the later stages the abattoir shall be expanded for export by increasing on freezer capacities without addition of equipment.

In the initial abattoir design provision has been made for the following daily capacities:

<table>
<thead>
<tr>
<th>LAIRAGES HOLDING</th>
<th>Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATTLE</td>
<td>80</td>
</tr>
<tr>
<td>SHEEP / GOATS</td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DRESSING FLOOR SLAUGHTER RATES</th>
<th>Per Hour based on 5 hours slaughter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATTLE</td>
<td>16</td>
</tr>
<tr>
<td>SHEEP / GOATS</td>
<td>/ 40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHILLER/FREEZER HOLDING</th>
<th>Chiller Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARCASS CHILLER (CATTLE)</td>
<td>35 (70 halves)</td>
</tr>
<tr>
<td>CARCASS CHILLER (SHOATS)</td>
<td>50</td>
</tr>
<tr>
<td>FREEZER (CATTLE)</td>
<td>35 (70 halves)</td>
</tr>
<tr>
<td>MEASLE FREEZER (CATTLE)</td>
<td>30 (60 halves)</td>
</tr>
</tbody>
</table>

The main work in this contract shall take place in the following areas: -

2. ABATTOIR BUILDING

The Contractor shall Supply, install, test and commission all necessary dressing equipment to the following areas. In addition, the Contractor shall take, deliver, install, test and commission Client Supplied items to the areas mentioned:

In the high-bay slaughter and dressing area comprising:
- Cattle Stunning and Bleeding Area
- Cattle Dressing Rail
- Warm Passage to Chillers
- Warm Passage from Chillers to Loadout
- One Carcass Chiller for Cattle
- One Carcass Chiller for Shoats
- One freezer for either shoats or cattle
- One Suspect Holding Room (Chiller)
- One Measled Carcass Freezer

In the low bay lean comprising of:
- Shoats Stunning and bleeding
- Shoats Dressing Rail
- 'Dirty' Workers Change Rooms, Head and Foot Room
- Equipment Sterilize Room
- Hide and Pelt Room
- Rough Offal Workup Room
- Ingesta (Manure) Holding Area
- Hot / Warm Water Wash Down

In the low-bay lean comprising of:
- 'Clean' Workers Change Rooms
- Managers/Inspectors Office and Toilet
- Storeroom - Workshop

Throughout the above provide the necessary equipment services connections shall be identified. **Note, that reticulation of all these services shall by others.** The Contractor shall identify all connections required specifically for his equipment. These shall comprise of:

- Hot Water (82°C)
- Warm Water (42°C)
- Cold Water
- Electrical Controls
- Wastewater Drainage
- Blood collection
- Manure Transport system from Tripes cleaning room to Manure Shed

All of the equipment shall be constructed to high standards of finish and shall comply with all legislation governing the operation of an abattoir.

3. **Outer Buildings**

Located outside of the Main Slaughterhouse building are:
   a) Emergency slaughterhouse.
   b) Post-mortem house.
4. **RESPONSIBILITIES**

The layout of the abattoir and the siting of the individual items of equipment shall be the responsibility of the contractor. However, notwithstanding anything to the contrary contained in the General conditions, the contractor shall arrange the equipment to achieve smooth product and workflow. The contractor shall take full responsibility for the detailed location of the individual items of equipment, and for the correct sizing and siting thereof in relationship to the building and between one item of equipment and another including the railing provided by others. Liaison with the rail contractor for proper location of the equipment along the rail shall be paramount. This shall ensure that unnecessary work fatigue is eliminated, and a smooth integrated flow of production is achieved.

5. **TRIAL SLAUGHTER**

Following the satisfactory completion of the commissioning tests undertaken in terms of the General Specification, during which the Contractors shall simulate the normal operations of the abattoir. This simulation shall be made in conjunction with other contractors on site and the client or his appointed representatives. The purpose of a full trial slaughter shall be to test the abattoir under full operating conditions.

The client shall provide a suitable number of animals and the slaughter staff for this trial slaughter. The Process Equipment Contractor shall be responsible for the co-ordination of the various other Contractors to ensure that all plant and equipment is ready and that the necessary specialist Contractor’s staff members are on standby and fully understand what is required of them during the trials. The basic procedure shall be as follows:

a. If the client is not able to supply a suitable number of animals, the contractor shall arrange to purchase a suitable number of animals from each of the three species. These shall be delivered into the lairages twelve hours before the date set for the trial slaughter. These animals shall be received by the abattoir staff and watered for the night.

b. The following morning the first of the cattle shall be taken through each work station of the entire slaughter process by the Client’s slaughter staff under the guidance of the Process Equipment Contractor and his staff supported by the electrical, refrigeration and building contractors (the builder to monitor drainage and effluent lines etc).

c. During this first run, adjustments shall be made to the equipment settings where necessary and, subject to a satisfactory run, the rest of the cattle shall be slaughtered on a continuous basis to put the full length of the line rail under full load test conditions. The carcasses shall be held over night in the chillers and freezer before being dispatched in order to test the cold room equipment performance. All offal’s shall be processed and removed from site the same day.

d. The same procedure shall be adopted for the sheep and goats which shall be slaughtered in that order following completion of the cattle.

e. The various contractors shall be required to keep a careful record of any problems which arise during the trial slaughter so that rectification work can commence immediately after the completion of the trial slaughter.
f. The County Engineers shall monitor the trial slaughter and produce a snag list noting any problems which were recorded during the trial. This list shall be presented to the contractor within 36 hours to rectify the snags observed.

g. In the event that substantial (as opposed to minor) remedial work must be undertaken after the first trial slaughter all the contractors shall undertake a second trial slaughter at a date set by the County Engineer, to prove the plant's ability to perform to specification.

h. Seven days after a satisfactory trial slaughter and the Engineer’s acceptance of any minor remedial work undertaken after the trial slaughter, the abattoir shall be taken over by the client, the County Engineer shall issue a ‘Taking Over Certificate’ under the General Conditions of Contract. The six months liability period shall commence.

All costs and allowances required to meet the above trial slaughter procedure must be allowed for by the Contractor at the time of tendering.

In evaluating the tenders, it shall be assumed that the Contractor shall have allowed in his price structure for all costs which he may incur during the trial slaughter.

6. FIXINGS AND MOUNTINGS

Tenderer’s attention is drawn to the specific requirements with regard to bolting equipment to the floors or walls.

All fixing bolts to be of stainless steel - chemical anchor type, any bolt projection shall be properly dressed off flush with the nut.

Before fixing plates and equipment feet are bolted into position, or during the assembly of items of equipment, the mating surfaces shall be prepared with Prestruck sealant in such a way that when the bolts are pulled down the sealant shall be squeezed out. The residue shall be cleaned off leaving a smooth small radius between the plate and the wall, floor or matching equipment face.
PART C – PARTICULAR TECHNICAL SPECIFICATION FOR CATEGORY A ABATTOIR PROCESS EQUIPMENT

1. CATTLE LINE

Items to be supplied, installed, tested and commissioned by the Process Equipment Contractor

1.1 VEE CRUSH

Lairage and Vee Crush have been built by the client under as described under Lairage.

1.2 CHAIN HOIST AND CRAWL

Supply and erect a 203 x 133 RSJ crawl beam mounted on suitable extended race posts along the length of the lead in race and V crush and into the abattoir above the stunning pen, complete with a proprietary crawl and 1 tonne hand operated chain block. The finish of the crawl and hoist must be suitable for external exposure and the mounting of the chain block must be such that the unit can be easily taken down and stored when not in use.

1.3 DROP BOTTOM STUNNING PEN

The contractor shall provide one standard (halal) ritual killing pen of the drop bottom swing-up door type complete with side sliding entrance door. The pen shall have been supplied to previous projects and have been proven by experience. The pen should be able to facilitate ritual (halal) killing as well as stunning.

The static frame of the pen shall be manufactured from heavy structural steel sections which must be securely fixed to the concrete floor, with suitable corrosion resistant levelling packs before final floor grout finish is applied. All fixing bolts to be of stainless steel - chemical anchor type. The contractor shall provide all necessary holding down details to the Engineer within eight weeks of appointment. The side and end plates shall be of not less than 5mm plate and be suitably and substantial braced. The back of the box shall be sloped forward to the bottom so as to force the animal’s feet together and prevent turning. The back plate shall have the same profile as the ‘V’ crush at the entrance which must then taper towards the front of the box to match the line of the sloped back. The end plate shall have a 200mm dia hole with edges reinforced by 18 dia rod formed to suit and welded into position 1200m above the floor which shall allow a rope to be passed through the end plate. A suitably drained tray sizes to hold the stunning pistol and an ammunition box must be fitted to the fixed end of the box. The design of the unit must permit for the dismantling of the whole into manageable sections for transport.

The moving bottom and swing-up door shall each comprise of a substantial frame made from heavy structural steel sections and clad with not less than 5mm plate. The floor shall have 10 x 10 MS sections welded at right angles to the line of entry at 300mm centres on that section of the floor which is exposed to the animal’s feet to prevent slipping. The whole floor frame shall be mounted to the main frame on three substantial bearings, one each on either end and the third in the enter. The central bearing shall be mounted to the...
floor and be at least 300mm wide. The bearings shall in all cases be from a suitable nylon material which shall require no further lubrication. The door shall be twice hinged, one at each end, on nylon bearings set in a suitable plumber block housing. Locking shall be means of a single spring loaded centrally pivoted locking bar made from 50 NB pipe fitted with machined steel end bars and handles. Substantial keep plates shall be mounted to the main frame on either side of the door, so made as to permit the lock bars to be guided into the locked position when the door closes under its own weight. Locking and unlocking shall be achieved by a single movement.

The top of the door shall be connected to the front ends of the floor by means of chains fitted on each side. The balance between the two shall be such that the weight of the empty door shall be sufficient to lift the floor back into the ready position while the door shall lock itself without assistance.

A sliding door made of shallow V formed steel plate set vertically in a frame running on robust ball bearing wheels in overhead sliding gear and fitted with an operator’s handle, which shall be within reach when the door is open, and allow the operator to close the door once the animal has entered the box. Design of this door is important and must be robust enough to withstand kicks, but light enough for easy movement.

A stunners platform is to be provided along the back and fixed end of the box complete with the necessary handrailing and stairs. The stairs must not project into the dry landing area.

After manufacture, to approved drawings, the Engineers shall witness shop testing/assembly of the unit before the unit is finished to Class "A" Paint finish.

1.4 DRY LANDING FRAME

A dry-landing frame is to be supplied consisting of two 1,000mm long x 12mm thick profiled side plates each fitted with two substantial adjustable feet to which, along the profiled top edge, are welded 10 No. x 50mm NB pipes each 2500mm long. The pipes shall form a cradle which catches and retains the animal when it is dropped out of the stunning / ritual killing box. Finish is to be hot dipped galvanized to specification.

1.5 BLEEDING HOIST/LANDING PLATE

The contractor shall supply and install one cattle bleeding hoist, preferably using chain not wire rope, mounted on a fabricated bed plate and driven by a 5kW reversing motor through a gearbox, the unit shall be fixed to the secondary steel giving direct lift to a bleeding shackle.

The hoist shall be provided with a sheave block, so made as to allow a bleeding roller to be hooked into the sheave and properly positioned to land on the rail. The underside bleeding rail shall be fitted with a 450mm long landing plate set at an angle of not less than 30 deg to the horizontal, this to ensure proper guidance and control during the automatic landing of the bleeding roller off the sheave onto the overhead rail.
If a chain is used, a Block chain guide shall be installed to centralise the chain and obviate spin during landing operations. Chain shall be rated for 3000 kg WL and certificated.

The hoist shall be provided with pendant controls for up, down movement, by means of push bottoms. Release of pressure on the buttons shall stop the hoist. The pendant and controls shall be waterproof to IP65 standards, a certificate from the manufacturer to this effect must be supplied. A 10mm dia stainless steel hook, mounted on a 200 x 200 x 6mm plate 4 times fixed to the wall with m8 SS bolts, shall be provided in a convenient position to hook back the pendant cable when not in use.

The motor shall be designed for a minimum of 60 stop/starts per hour, and the contractor shall fit limit switches of the hunting tooth type so that at the requisite height, auto reverse to obtain landing shall ensure. A further overwind, backup safety cut out, is required. The hoist shall also be stopped by a limit cut out when the hook is 150 from floor level. Painting shall be to Class "B" specification.

The Contractor shall supply all the support steelwork and necessary bracing required to mount and stabilise this hoist to the secondary steelwork. Connection to the rail support steelwork shall be by means of 'Lindaptors' or similar proprietary clamps. Site drilling or welding shall not be permitted.

1.6 BLEEDING RAIL SUPPORT STEELWORK

All necessary secondary support steelwork for the bleeding and return rail system shall be supplied under this clause. The Contractor is to design in accordance with B.S. 449 for the uniformly distributed loads imposed by the rail system and must conform in all respects to the general specification for steelwork.

Full allowance must be made in the design for the connection to the rail support steelwork supplied by others.

It should be noted that only the primary steelwork provided under the rail contract shall be used for attachment of equipment support of the secondary steelwork. No connections or load points shall be permitted on the walls. In the case of the return rail connections must be made to the building columns or fixed to the floor by means of free-standing posts.

All steelwork, bracing etc shall be painted in accordance with the Class 'A' paint Specification. Provision is to be made for mounting of all hoist and hoist support steelwork by the contractor.

1.7 BLEEDING RAIL ASSEMBLY

The contractor under this contract shall detail a bleeding overhead bi-rail to the route to be shown on site at a height of 4700mm from floor level. Rail shall be 100 x 18 MS flat bar, complete with hot rolled bends, end stops and landing plate, and drilled if required for hangers. The rail shall be designed to withstand a live load of 1500 kg/metre from the landing area to a point 1,000mm beyond the bend after the transfer station. The section of rail 400mm either side of the centre line of the bleeding hoist must be set sufficiently off centre of the grid steel to allow clearance for the hoist cable and sheave above the rail during the landing operation.
Part of this supply shall be to provide RSC hangers of at least 76 x 38 section pitched at centres a maximum of 500mm apart, and either bolted or welded to the rail. The top of the hangers shall be four times bolted to the RSJ forming part of the secondary steel grid for this area. The steel, hangers, and any bolts and nuts shall be painted to class 'A' specification.

The rail shall be sand blasted and coated with an approved edible oil. On completion of the erection and prior to trial slaughter, all rails shall be cleaned of all rust etc and recoated with an approved edible oil.

1.8 BLEEDING RETURN RAIL ASSEMBLY

The contractor shall detail an overhead bleeding roller return bi-rail to the route to be shown on the site starting at a point 1,000mm beyond the transfer bend and falling to a height of 4400 from floor level at the entry to the lowerator. The rail shall be of the bi-rail type with moment of inertia of the rail path equal to 46.44 cm⁴. Joining elements of the saddles to the handling beam to be made of AISI-304 stainless steel. Screws in stainless steel AISI-304. Dimensional tolerances profile of the track according to norm UNE 30.0. T-5 temper treatment of the track profile according to UNE-EN-755-2: 1998. Alloy of the saddles according to UNE 38252 1st revision. The rail shall be designed to withstand a load of 100 kg/metre.

A suitable guard rail shall be provided from the end of the transfer station to the point of entry into the lowerator sized and positioned to prevent the bleeding rollers from coming off the rail during return.

Part of this supply shall be to provide hangers suitable for the bi-rail system and of at least 30mm dia section pitched at centres a maximum of 900mm apart, and either bolted or welded to the rail. The top of the hangers shall be welded or clamped to an RSJ forming part of the secondary steel grid for this area. The steel, hangers, and any bolts and nuts shall be painted to the class ‘A’ specification.

The rail shall be sand blasted and coated with an approved edible oil. On completion of the erection and prior to trial slaughter all rails shall be cleaned of all rust etc and recoated with an approved edible oil.

1.9 BLEEDING ROLLER LOWERATOR

The Tenderer shall provide an automatic bleeding shackle lowerator suitable for lowering bleeding roller/shackles from the return section of the bleeding rail at a height of 4400mm above the floor to a magazine rail at 1500mm above the floor. A mechanical stop system is to be provided to ensure that shackles shall be fed into the lowerator one at a time automatically as the lowerator cage returns to its upper position.

The lowerator support cradle shall be counter balanced by means of a cast iron weight running in a rectangular steel tube or cylinder which shall incorporate a water damping mechanism to prevent the too rapid movement of the imbalanced shackle cradle on its upward return when empty. The water damping system shall incorporate a small reservoir
and ball valve control at the top of the tube to ensure that the system remains full of water at all times.

The design of the lowerator must be such that swinging shackle chains are controlled and guided into position prior to lowering and in such a way as to ensure that these chains neither snag in the mechanisms nor fall off. A suitably positioned plugged drain pipe must be supplied at the bottom of the pipe to allow the unit to be drained from time to time.

The danger of damage to walls in the immediate vicinity of the lowerator should be considered when planning the relationship between the lowerator, the storage rail and the wall guard called for in clause 1.11.

The whole of the above unit shall be manufactured from mild steel. All welds are to be cleaned down, de-slagged and ground smooth where necessary. Finish is to be hot dip galvanized to specification.

All fixing bolts to be of stainless steel - chemical anchor type. Incompatible materials are to be separated by a neutral material to prevent galvanic action.

1.10 S.S. WALL PROTECTING PIPEWORK

A 30 dia stainless steel pipe, mounted on stainless steel brackets sized to hold the pipe 300mm off the wall and positioned to be 150 above the bleeding shackle hook for the full length of the return travel of the hook along the wall to the lowerator, must be provided. Mounting by a minimum of two support brackets, each three times fixed to the wall, must be provided. All fixing bolts to be M10 stainless steel - chemical anchor type.

1.11 WALL PROTECTOR PLATE

An aluminium chequer plate at least 6mm thick and 1000 high x 2000 long must be mounted to the wall and be so positioned that the swinging bleeding shackle cannot come in contact with the wall when the roller is stored on the storage rail.

All fixing bolts to be of stainless steel - chemical anchor type, any bolt projection shall be properly dressed off flush with the nut. Before the plate is bolted in to position the plate shall be prepared with Prostruct sealant in such a way that when the bolts are pulled down the sealant shall be squeezed out. The residue shall be cleaned off leaving a smooth radius between the plate and the wall.

1.12 BLEEDING ROLLER STORAGE RAIL

The storage rail shall be of the birail type. The rail shall be designed to withstand a load of 200 kg/metre. One end shall be aligned with the lowerator cradle rail when in the down position and the other end fitted with an upstand stop of the same material. The rail shall be set to slope away from the lowerator with a fall of not less than 150mm over its length.

At least two mounting brackets made up of plate sections pitched at centres a maximum of 1200mm apart must be provided and either bolted or welded to the rail. The brackets shall have a back plate which shall be three times bolted to the floor mounted support posts. Prostruct sealant shall be applied when the plates are mounted. Finish is to be hot dipped galvanized to specification. All fixing bolts to be M12 stainless steel - chemical anchor type.
type. Incompatible materials are to be separated by a neutral material to prevent galvanic action. Brackets to be painted to class 'A' specification.

The rail shall be sand blasted and coated with an approved edible oil. On completion of the erection and prior to trial slaughter all rails shall be cleaned of all rust etc and recoated with an approved edible oil.

1.13 BLEEDING ROLLERS AND SHACKLES

A) Bleeding Rollers

The bleeding roller trolley is required to carry a safe working load of not less than 1500 kg and must be designed and manufactured to suit the shackling requirements. The rollers must be suitable for use on the bi-rail system.

The wheel shall be of mild steel, machined finish throughout designed to withstand the operating conditions in the abattoir where rollers are subject to constant impact with each other and with the concrete and other hard surfaces. The wheel bore must be machined concentric with the flanges and the rolling surfaces and must be smooth and free from defects. Oil lubrication facilities shall be fitted to ensure that adequate pressure lubrication can be applied to the bearing surfaces. Bearing Pin shall be manufactured from mild steel sized to suit two ball bearings mounted on either outside face within the total width of the wheel and be kept apart by a suitable spacer when the bearings are clamped in position by the axle assembly.

The trolley frame shall be designed to carry a safe working load of 1500 kg without bending or distortion. The whole unit shall be jig formed to ensure uniformity of shape and dimension, lifting lugs shall be jig assembled and welded into position to ensure standard positioning throughout all frames. Prior to assembly of the wheels all frames must be thoroughly cleaned and hot-dip galvanized.

B) Bleeding Shackles

Each bleeding roller shall be fitted with a shackle chain so made that the shackle chain forms one entity with the bleeding roller. The connection between the roller frame and the chain to comprise a coupling link, a swivel and a coupling link.

The chain shall be fitted with a hook on the end suitable for shackling the animal’s hind leg. The chain is to be manufactured from twist link chain and be suitably sized to withstand shock loads of 1500 kg, the length of the chain is to be carefully calculated to suit both the bleeding and the transfer station height requirements. Each assembly should be tested to ensure that these loads can be obtained. The entire shackle chain assembly shall be hot dip galvanized after manufacture.
1.14 FIXED BOLT STUNNING PISTOL

A proprietary brand fixed bolt stunning pistol is to be provided similar and equal in all respects to ‘Cash’ type pistol. The tenderer is to provide full details of the type and make of pistol offered under this clause.

Full details of the make and source of manufacture of the blank ammunition required for the pistol are to be supplied with the tender. This may not be necessary if halal (ritual) slaughter is adopted.

1.15 BLOOD & WATER DRAIN AND PIPING

A set of blood and water drains are required suitable in length for casting into the concrete floor of the blood trough allowing sufficient clearance for connection to the cast iron effluent pipe and the SS blood pipe.

The unit is to be manufactured from 304 stainless steel and comprise two 150mm dia inlets and two outlets, one off 150mm in dia with suitable connections to the 150mm dia blood pipe line, the other 150mm dia inlet to reduce to a+/- 100 dia to fit into a standard cast iron waste water pipe.

The unit shall be fitted with a neat fitting interchangeable plug securely chained to the body of the main unit between the outlets and so made as to fit both the blood and the water outlet. The 150mm blood outlet must be clearly marked BLOOD and the 100mm water outlet clearly marked WATER to avoid confusion in use.

The blood piping is to be 150mm dia 1.5mm wall thickness 304 stainless steel of sufficient length to connect the floor drain to the blood sump outside the building. All bends must be long radius and all connections must be clean and smooth on the inside face.

Both the drain and the piping must be delivered to site at an early stage of the works to allow building in.

1.16 BLOOD PUMP, HOSE & SUMP COVER

A) Blood Pump

A blood pump and delivery hose to the following specification is required to be installed at the blood sump set between the main building and the lairages:

Pump and Motor

The pump shall be a self-priming, centrifugal type capable of handling spherical solids sized up to 38mm. The impeller shall be an open vane type made from cast iron BS 17 or better.

The casing shall be grey iron BS grade or better with removable cover plate and internal wear plate.

The impeller shaft shall be EN8 or better and the bearings shall be greased for life.

The pump shall be belt driven by a TEFC motor on 'piggy back' galvanized bases. The motor and drive shall be protected against the environment. The gearing shall be such that
the pump shall deliver approximately 400 litres/min at static head of 4 metres open ended delivery.

While only one pump/drive is to be supplied with this clause the mounting base MUST be designed and supplied sized to accommodate two pumps/drive sets of the same size and specification positioned next to each other to allow a matching pump to be installed in the future.

**B) Delivery Hose**

A heavy walled galvanized delivery pipe sized to suit the outlet of the pump is to be supplied and installed on suitable galvanized brackets, set at a maximum 1200 centres and sized to hold the pipe at least 150mm off the face of the wall, each bracket to be twice bolted to the wall. The pipe is to be routed to rise straight up from the pumps to a slow radius bend fixed to the abattoir wall from where a section of similar diameter flexible hose shall be coupled to the pipe with a 'snap' connector of the type using two levers to pull the two ends together. This pipe shall be of suitable length to deliver the blood into a vehicle for removal from the site.

**C) Sump Cover**

The sump cover shall be 1200mm wide and 2200mm long divided into two by a division angle in the middle of the 2200mm line and set 10mm below the top. The unit shall comprise a 50 x 50 MS angle iron frame with splayed build in lugs at 400 centres and fitted with a 12 x 12 MS bar set all around the inside of the frame and 10mm below the top.

The two cover plates shall be from 6mm o/c MS plate each 1200 x 1100 in size stiffened by shallow cross folds taken from corner to corner and fitted with two lifting handles each of which shall be fitted through holes in the plates so as to lie flush on top of the plates when not in use. One of the plates shall be notched out to clear the delivery pipe.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish for all MS components is to be hot dip galvanized to specification.

**D) Blood Sump Plug**

A special sump plug is required to be supplied to the building contractor for building into the blood sump. The unit shall comprise a 100mm dia body 300mm long fitted with a puddle flange, machined at an angle to match that of the plug. At a distance of 100 from the top. A guide plate with a hole sized to accept a 16 dia rod shall be welded into the inside of the body. The other end of the tube shall be fixed to fit into a standard Cast Iron sewer pipe.

The plug shall be machined to fit into the tapered end of the tube and be fitted on the one end with a 16mm dia 1300mm long pull rod with a T handle on the end.

On the other side of the plug the rod shall project 250 beyond the plug to act as guide in the guide plate.
The whole unit is to be made from a non-corrosive material such as brass or stainless steel.

### 1.17 BOOT WASH UNITS

Boot wash units are required at various points in the installation and this specification shall apply in all instances, other clauses shall refer to this clause for details.

The unit shall be made from a 400mm dia dished end x 4mm thick MS which shall have a rolled back plate equal to half of the circumference welded to the back half of the dished end, to form a back plate 400mm high. The edges of the back plate and the open half of the dished end shall be stiffened by having a 12mm dia rod continuously welded along the whole length of the edge. The upstand of the dished end shall be such as to create a depth of not less than 100 at the deepest part. A footrest ex 25 pipe shall be fixed across the centre line at the point where the back plate joins the dish, the top of the pipe shall fit in under the 12 dia stiffened edge.

The unit shall be mounted on a 80 NB light wall pipe welded to the centre of the dished end. This pipe shall act as the drain for the unit and the dish outlet shall be the full dia of the pipe ID. The pipe shall be mounted on a triangular 12mm plate three times drilled with 18mm holes. This plate shall be set at not less than 50mm above the floor level and fixed on three 16 dia SS bolts with nuts under and on top of the plate to locate same. The length of the support shall be such that the foot rest is set at 450mm above the floor.

A 1,000mm length of flexible reinforced 12mm cold water hose shall be provided connected to a 12mm dia supply pipe welded to the back plate on left hand side, this pipe shall be fitted with a lever actioned ball valve. The other end of the pipe at the back of the unit shall be turned upwards and fitted with a union suitable for connection to the cold-water service supply. A nylon brush with a plastic handle shall be provided and fixed to the right-hand side of the unit by means of a suitable length of chain of non-corrosive material.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

All fixing bolts are to be stainless steel and of the chemical anchor type. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion. The contractor may supply equal and approved alternative Boot wash booth.

### 1.18 WASH HAND BASIN & STERILIZER

#### a) Stainless Steel Wash Hand Basin

S.S. Wash hand basin (WHB) shall be positioned next or fixed to platforms according to the drawings for this and all other areas where advised. In most cases, a basin shall be required with an attached knife sterilizer (WHB/S) and either kind may be mounted on the floor or on a platforms.

The contractor shall provide and install WHB or WHB/S as requested, and to the number required, complete with waste pipe which shall lead the waste water as close to the floor as
possible in order to allow the waste water flow over the floor. Service connections warm water at 40 Deg C and hot water at 82 Deg C shall be provided. The S.S. WHB shall be complete with integral piping so that the services are to be connected to 2 connections facing vertically upwards and fitted with a union.

The S.S. WHB shall be of a stainless-steel oval shaped cone, open at the top, with one (rear) side vertical, and with the vertical back extended upwards to form a splash plate. Dimensions of the basin itself shall be approximately 400mm wide x 300mm deep and the top of cone, with the splash plate extending a further 350 upwards. Height from floor to top of cone shall be 900mm.

The cone or basin shall be developed from a flat plate of 304 SS, with a seam weld positioned down the front edge. After shaping and welding, the top edges shall be curled to form a stiffening lip. No plug or mesh or any other obstruction is required at the basin outlet.

The cone drain, made from 304 SS 70 dia tube shall double in duty as a post supporting the whole assembly, and shall be fitted with a triangular flange plate as a foot. The flange plate shall have a 70 dia hole to allow water to drain to the floor or connecting drainpipe and be drilled for 3 x 16mm mounting bolts. Where the basins are mounted to the floor ALL FIXING BOLTS are to be stainless steel and of the chemical anchor type. NO OTHER form of fixing shall be permitted. On platform installations the drain/floor post shall penetrate the platform or outrigger mounting plates and drain to the nearest spoon drain under.

The wastewater shall transfer from the 70mm basin pipe to a 50mm diameter waste pipe by means of an open funnel so assembled as to allow cleaning of either pipe without disassembling the plumbing. The extended drainpipe shall be properly supported off the platform frame.

At the front of the WHB assembly the post shall carry a knee operated valve for 40 deg Celsius (warm) water which shall be piped from one side to a connection point at the back of the basin for input, and piped from the other side vertically upwards to a fixed, flush mounted vandal proof spray discharge. Piping shall either be 15mm OD copper (domestic grade), or 304 L stainless steel.

On the splash back a stainless-steel liquid soap dispenser shall be mounted comprising a 30 diameter SS pipe 100mm long capped on both ends with a slotted hole 20mm wide and 70mm long in the top to permit entry of fingers. All sharp edges are to be rounded off.

All brackets or pipe supports shall be stainless steel, and it is important that all horizontal surfaces of support plates or angles be minimized, and that corners be avoided where any possibility of dirt collection could occur.

b) Knife Sterilizers

Note that the client has supplied some of the knife sterilizer. The contractor shall supply any additional required.

Knives sterilizers are already supplied by the client and stored on site. The 5 No. sterilizers are of stainless-steel body with 2.75kW heating element and ½” male bottom inlet nipple.
for hot water. That notwithstanding, it shall be the Process Equipment Supplier’s responsibility to install the said sterilizers so as to meet the following technical specification in terms of their operation.

The sterilizer body shall be formed from a 150mm dia Stainless steel tube 400mm long capped on the bottom and fitted with a lipped overflow weir which shall act as the top hooking point to hold the sterilizer onto the basin rim. A second, two-point bracket, set 300 down from the top of the sterilizer shall contact the body of the basin allowing the sterilizer to be firmly held in a vertical position, hooked at the top and held against the basin by gravity.

The sterilizer shall be fitted with a loose perforated plate set 50mm from the top which shall have two slots for 2 knife blades and a hole for a sharpening steel. The sterilizer shall have no drain. Hot water at 82 Deg C shall be piped to a suitable radiator valve which enable accurate water flow rates. The water shall then be fed through a 10 or 12mm chromed copper or SS pipe from the radiator valve into the sterilizer from the top, with the pipe reaching to within 20mm of the bottom. This water shall overflow from the sterilizer into the basin over a 40 wide lipped weir formed as part of the sterilizer. The sterilizers must be able to be unhooked for cleaning without disturbing the hot water pipe.

Piping for the sterilizers hot water shall be integral with the wash hand basin, commencing with a right-angle radiator needle valve mounted on the same bracket as the warm water pipe. Adjustment of this valve shall be by screwdriver only. The adjustment screw shall be fitted with a screwed cap to prevent unauthorised tampering with the setting.

The final finish of all components shall be a 180 grit to both inside and out after removal of all traces of hear from welding. All welds must be fully passivated.

1.19 DRESSING RAIL SUPPORT GRID STEELWORK

Supplied and installed by others.

1.20 DRESSING RAIL SYSTEM GENERAL

Supplied and installed by others. However, the Process Equipment Contractor shall ensure proper coordination with others for the purpose of harmonious transfer of the carcass from bleeding rail to the dressing rail that is installed by others.

1.21 TRANSFER HOIST

The contractor shall supply and fix, complete with all necessary steelwork support, one Proprietary make of 1 tonne Chain hoist complete with pendant control for up/down motion. Pendant cables shall be approximately 1,400mm long, suitable for operation from the Transfer platform, and supported by a suitable steel wire rope. Release pressure on the buttons must stop the hoist and the complete pendant must be waterproofed to IP65 standards. A manufacturer’s certificate to this effect must be provided.

The motor must be capable of 100 stop/starts per hour and be fitted with an automatic overwind stop. A certificate shall be required.
The standard hook of the hoist shall be amended by the contractor to facilitate transfer operations by the addition of 20 dia SS hook which shall fit onto the hook and into the gam of the hind leg. A handle shall be welded to the back of the hook to allow the transfer hook to be withdrawn from the gam once the leg is suspended on the dressing roller hook. The hook shall be hot formed and reinforced in the bend.

The contractor is to supply all support steelwork required for this item. This steelwork shall be attached by means of the Lindaptor system (or similar and approved), to the rail support steelwork only. Loads shall not be transmitted to any other portion of the building structure. Site drilling and welding shall not be permitted. Steelwork shall be designed in accordance with BSS 449. All steelwork, bracing etc shall be painted in accordance with the ‘Class A’ paint Specification.

1.22 TRANSFER AND BACK DRESSING PLATFORM

This platform shall be composed of base plate and columns, all made of stainless steel with nylon bushings, a grill made of anti-slip epoxy resin, safety banisters, foot protection / guard rail, stainless steel plates for floor fixing. The cattle transfer platform shall be complete a chute for hind legs collection, wash hand, knife sterilizer and soap dispenser / disinfectant. The clear size of the work platform shall be 2m x 1.5m. The platform shall be strategically located in such a way that it shall serve carcass transfer (from bleeding rail to process rail), cutting of hind and front legs and horns and also dressing of the back of the carcass.

1.23 FRONT DRESSING PLATFORM

The platform shall be as Item 1.22 above. The clear size of the platform shall be 1.5m x 1m and shall incorporate one wash hand basin, knife sterilizer, soap / disinfectant and handrails and foot guard rails. It shall be of stainless steel.

1.24 EVISCERATION PLATFORM

The platform shall be free standing and fitted with approved adjustable feet to take up floor slopes. Provision must be made in the design for the foot plate to be bolted to the floor if required. All fixing bolts are to be stainless steel and of the chemical anchor type. The platform will be constructed from not less than 50 x 50 MS tubular steel frame suitably braced and stiffened and so designed as to firmly support four working surfaces. The platform will be 900mm wide, each of the work surfaces will be formed from 4.5-61 chequer plate (vastrap) flooring with three of the four sides turned up 100m to form a kicking step and one (on the step side) turned down 50mm. Corners of the upstands will be notched to make cleaning easier and more effective. The form of all bends will be a radius of not less than 25mm to facilitate cleaning, this will apply to all platform surfaces. The back end one side of the platform will be fitted with tubular stanchions and hand and knee rails, the high side railing must be set 300mm back from the front of the platform to clear the carcass. Flooring will be drilled for drain holes at one 10mm hole per square metre. The underside of the platform will be braced to prevent distortion during

Dec 2020
galvanizing, the brace will be notched 20mm deep and 150 long every 200mm, resulting in
a platform connection length of 50mm, to minimise the amount of welding required.

Where wash hand basins are required they are to be mounted on outrigger brackets and
moved back out of the work zones, handrailing will be stopped on either side of the
WHB/S to permit access.

Two platforms, whose accurate dimensions shall confirmed by the equipment contractor
shall be required:

1,250 above the floor and 2,000 long, the 1st 1,000 of front edge straight and the second
1,000 notched to allow the paunch to pass through to the paunch tray
400 above the floor and 800 long - two steps required

The platform shall require one WHB/S and be fitted with handrailing on the back and high
sides only. Access shall be on the high side and be by way of a ladder rather than steps.
The ladder stringers shall extent 1,000mm above the platform level and be stiffened for
stability.

1.25 CARCASS SPLITTING PLATFORM

The platform shall be free standing and fitted with approved adjustable feet to take up
floor slopes. Provision must be made in the design for the foot plate to be bolted to the
floor if required. All fixing bolts are to be stainless steel and of the chemical anchor type.
The general form and manufacturing requirements shall be as specified in clause 1.24,
specific requirements are as follows:

Three platforms the contractor shall confirm actual sizes to suit the location:

1,200 above the floor and 800 long
600 above the floor and 800 long - requires one step
300 above the floor and 500 long - shared with inspection platform

The platform shall require a carcass saw sterilizer (elsewhere measured) to be mounted
and be fitted with handrailing on the back and high sides only.

1.26 PLATFORM

The platform shall be free standing and fitted with approved adjustable feet to take up
floor slopes. Provision must be made in the design for the foot plate to be bolted to the
floor if required. All fixing bolts are to be stainless steel and of the chemical anchor type.
The general form and manufacturing requirements shall be as specified in clause 1.24,
specific requirements are as follows:

Four platforms are required:
1200 above the floor and 500 long
900 above the floor and 500 long
600 above the floor and 500 long
300 above the floor and 500 long - shared with splitting platform
The platform shall require a WHB/S and be fitted with handrailing on the back and high sides only.

1.27 CARCASS WASH PLATFORM

The platform shall be free standing and fitted with approved adjustable feet to take up floor slopes. Provision must be made in the design for the foot plate to be bolted to the floor if required. All fixing bolts are to be stainless steel and of the chemical anchor type.

The general form and manufacturing requirements shall be as specified in clause 1.24, specific requirements are as follows:

Two platforms are required:
900 above the floor and 700 long
300 above the floor and 700 long - requires one step

The platform shall be fitted with handrailing on the back and high sides only.

1.28 HEAD WASHING AND DEMASK CABINET

In the position shown to be shown to the contractor by project manager or Engineer, the contractor shall install a cabinet with a shallow trough shaped working top set at 900 above floor level with upstands to three sides of 75mm, and a splash back of 800 high so made as to wrap around to the sides by 100mm. The edge of the trough and back plate shall be stiffened by continuously welding a 12 dia rod around the whole length of the edges. The trough shall be fitted with 50 dia drain spigot plumbed to drain 100mm above the floor underneath the front dressing platform.

The trough shall be mounted on a four-legged frame made from not less than 40 x 40 rectangular tubing, suitably braced and stiffened and fitted approved adjustable feet complete with locknuts. Two slotted bolting lugs must be fixed to the back of the back plate in a position which shall allow the unit to be bolted to the support legs of the front dressing platforms.

The back plate of the unit shall be fitted with a substantially made and mounted hook assembly set at 600mm above the floor of the trough and 250mm clear of the back plate which shall support and correctly present the head for nostril flushing, removal of the tongue and demasking. The head hook shall be swivel mounted and be made from 20 dia 316 stainless steel with a blunt to which a 6mm thick collar is fitted. A wash gun with nozzle suitable for head and nostril flush complete with 1500 long reinforced flexible hose 12mm dia must be provided. The hose is to be fitted with a snap coupling which shall connect to a cold-water pipe fixed into the side of the right-hand side of the back plate, provision is to be made for connection to the service piping by means of a union at the back of the unit. A hook must be provided on which to hand the gun when not in use.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. Incompatible
materials are to be isolated by a neutral material to prevent galvanic corrosion. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

1.29 FOUR PART HEAD & FOOT INSPECTION RACK

A set of two wall racks are required to store and hold heads and feet prior to inspection for measles and foot & mouth. The rack shall comprise three wall mounting brackets made from 400mm long 80 x 12 MS flats twice drilled for M16 bolts.

a) Foot rack

Welded in the centre of this wall bracket is a 440mm long side support 12mm thick plate parallel in the top, sloping on the bottom, 120mm wide at the wall bracket tapering to 70mm at the front. These brackets shall be tied together by seven 1,300mm long 18mm dia MS bars six equally spaced along and 20mm above the bottom edge of the support bracket, the seventh bar to be set 40mm above the front lower bar. The unit to be assembled a final length of 1,300mm

The level of the bottom foot rack is to be 500mm from the floor and the head rack set at 1,000mm above the floor.

b) Head rack

Shall comprise two 50 NB pipes fixed to the support brackets by means of two 10mm side plates sized to set the pipes 100 apart. Four head support frames shall be made from 16mm dia MS bar formed to accept and hold a head upside down and steadied with the front bar inserted into the mouth.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

1.30 S.S. HIND FEET CHUTE

A 250mm dia 1.5mm thick stainless-steel chute 1,500mm long is to be fixed to the end of the transfer platform to guide feet from the operator to a collection bin placed under the platform. The chute shall be fixed and customized to suite vertical the transfer platform Clause 1.22. The top of the chute is to be fitted with a 350mm dia funnel shaped inlet with edges stiffened with a 12mm dia rod continuously welded around the circumference.

The unit is to be bolted to the platform at two points along its length to ensure stability. All welds are to be continuous, thoroughly chipped and cleaned down, passivated and ground smooth where necessary. Finish to be 180 grid polished. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

1.31 S.S. TRIMMINGS CHUTE

A 250mm dia 1.5mm thick stainless-steel chute 1500mm long is to be fixed to the end of the transfer platform next to the foot chute to guide trimmings and condemned material
from the operator to a collection bin placed under the platform. The top of the chute is to be fitted with a 350 dia funnel shaped inlet with edges stiffened with a 12mm dia rod continuously welded around the circumference.

The unit is to be bolted to the platform at two points along its length to ensure stability, with sufficient space between the two chutes to permit the placing of two bins next to each other on the floor. All welds are to be continuous, thoroughly chipped and cleaned down, passivated and ground smooth where necessary. Finish to be 180 grid polished. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

1.32 FOOT AND TRIMMINGS BINS

Three Proprietary make food grade white polyethylene plastic bins are to be provided fitted with suitable handles and lids or equal and approved in food Grade Stainless Steel. The units are to stand 650mm high be 470mm in dia tapering towards the bottom. The finish is to be smooth and easy to clean.

1.33 PAUNCH TRAY WASH AND STERILIZER

( NOT TO BE SUPPLIED IN THIS PHASE)

The unit shall comprise a back plate 1,000mm wide and 1200mm high with flanged sides to form deflectors. The floor shall be so made as to support the pan being washed and catch the wash water and guide it by means of a sloping floor to a 50 dia drain pipe which shall pass through the wall behind into the rough offal room and be led into the floor spoon drain. The unit shall be made of 3mm mild steel with edges stiffened by means of an 18mm dia bar continuously welded to the edge and be 4 times bolted to the wall with sealed spacers 100 long to lift the unit clear of the wall. A substantial hook is to be provided on right side of the unit on which to hand the wash gun.

A hand-held wash gun with thermal protection against hot water is to be provided complete with a 200 long reinforced 'blue' high temperature reinforced hose fitted with a 'snap' connector. The 'snap' connector shall be compatible with the outlet of the hot/cold combination wash point on the wall above the unit (elsewhere measured).

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

1.34 PAUNCH TRAY WALL STORAGE RACK

( NOT TO BE SUPPLIED IN THIS PHASE)

A wall mounted storage rack is to be fixed to the wall above the hide hatch. The unit is to be 950mm wide and comprise two racks set one above the other. The racks shall be set at an angle to the horizontal to permit the storage of two trays lying upside down at an angle of not more than 30 deg off the wall.
Each rack shall be made from two 80 x 12 MS flats welded at an angle to two 1000 long 80 x 12 MS mounting brackets each three times drilled for m16 bolts. The side frames shall be connected to each other by 8 950mm long 18mm dia rods set 4 to each rack. All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanizing to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

1.35 RED OFFAL INSPECTION RAIL

A 2500mm length of 80 x 12 MS rail is to be provided to carry the 'on rail' inspection rack. The specification shall be equal to Clause 1.29 above in all respects.

1.36 RED OFFAL INSPECTION RACK

An 'on rail' inspection rack comprising a 4-compartment unit created by welding four 300mm wide x 1400mm long 3mm thick, 304 stainless steel plates to a 50 dia S.S. pipe at 92 deg to each other, all of the edges stiffened by a 5 deg crease fold. The pipe shall be sealed top and bottom and be fitted with an eye bolt at the top of connect into a standard dressing roller. A 12mm dia meat hook shall be provided in each compartment set 100mm down from the top. The level of the whole unit shall be set high enough to allow the operator to put a full pluck on the hook from the lower evisceration platform without contacting the platform and yet low enough for inspection to take place from the floor. The compartments shall be clearly and permanently marked with numbers 1 to 4 consecutively. All welds. are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. All sharp edges are to be smoothed off. Finish to be 180 grit polish throughout.

1.37 CARCASS CHIP SCREEN

A chip screen is required manufactured from 1.5mm thick white nylon reinforced plastic screen, with an effective size of 2000mm wide and 3200mm high. The screen shall be folded over and seamed top and bottom to accept a 25 dia steel pipe or bar for the full width of the curtain, the one at the bottom to act as a counterweight, the one at the top to project beyond the curtain and act as a mounting pivot which shall in turn be fixed to a 50 dia mild steel medium walled pipe frame which shall be 3 times fixed at each end to the secondary grid, and so sized and made as to align the top of curtain level with the rail and 600mm off the centre line of the rail. The top of the curtain shall be set at a height of 3500mm above the floor. The chip screen support frame and pivot/spreader bars/pipes to be made from mild steel. All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.
1.38 CARCASS WASH SCREEN

This item shall in every respect be the same as that supplied under Clause 1.37 above, except that the effective screen shall be 2500 wide and 3600 high. The top of the screen shall be set 3900 above the floor and angled towards the rail to prevent over spray.

1.39 S.S. CARCASS SPREADER BARS

Six spreader bars are to be provided comprising an 800mm long 30mm dia thin-walled stainless steel tube with a 12mm dia open U shaped keep on one end and a 12mm dia closed U shaped keep on the other end in which the legs have been curled back to form a pair of hooks which when placed through the animal’s gam and turned through 92 deg shall prevent the spreader from falling when the carcass is split.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary.

Finish to 180 grit throughout.

1.40 DRESSING ROLLERS

The rollers should be compatible with the dressing rail system (installed by others). The roller assembly shall be capable of suspending a mass of 700 kg (kilograms) during normal operations and be tested with a static load of 1,000 kg. The weight of the rollers shall be uniform with a mass tolerance to the average of the 100 units, of plus or minus 4 gms.

The wheel shall be corrosion resistant and shall be supplied for all units in SG cast iron, the material shall be free from blow holes or other defects and shall generally conform to the following specification:

a. Grade S.G.I. Tempered.
b. Comparable to BSS 2789/1961 - SNG 32/7

The frame of the trolleys shall be manufactured from EN9 steel of cross section suitable for the above mass, be jig formed and drilled to ensure uniformity of dimensions and alignment of assembly. After forming the frames shall be surface blasted to remove all scale and hot dipped galvanized to specification.

The bearing pins shall be manufactured from stainless steel of not less than 20mm dia. Lubrication of the cast iron wheels shall be catered for by way of an end drilled hole leading to a grooved pin surface.

The hook shall be suitably formed for insertion into the punched gam of beef carcasses and shall be manufactured from 18/8 type 316 stainless steel round bar of not less than 18mm dia capable of no permanent distortion when suspending 700 kgs.

1.41 DRESSING ROLLER PUSH RODS

Dressing roller push rods are required. The unit must be of rigid light weight construction with the shaft from either aluminium or galvanized mild steel conduit tubing 2200 long
sealed on the one end and fitted with a 10 dia S formed round bar hook set at 30 deg at the
vertical on the other.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth
where necessary. If galvanized steel is used the welds only should be neatly painted.

1.42 ROD HANGING HOOKS

Three sets of push rod hanging hooks are to be provided comprising two 16 dia 80 long
steel rods set 30mm apart and sloping upwards and outwards at an angle 30 deg to the
horizontal and welded to a 10mm thick 150 x 150 MS plate twice drilled top and bottom
for 10 dia fixing bolts. The hooks are to be fixed as follows:

a. At the bleeding end of the dressing floor.
b. At the chiller end of the dressing floor
c. In the load out area.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth
where necessary. The finish is to be hot dip galvanized to specification.

All fixing bolts are to be stainless steel and of the chemical anchor type. All contact
surfaces to have suitable Prostruct sealant inserted before final assembly.

1.43 RED OFFAL 'ON RAIL' CARRIERS

(To be omitted in this contract)

Passed red offal is required to be carried 'on rail' the carrier shall be fabricated from a
25mm NB medium wall pipe 2400mm long to which is welded three sets of four hooks
each set 100mm, 600mm and 1,100mm up from the bottom of the pipe. The pipe shall be
sealed on the bottom and fitted with a fixed ring on the top sized to suit the hook of a
standard dressing roller.

The three sets of hooks shall each comprise 4 individual hooks made from 12mm dia MS
rods 140mm long with a 30 deg sloped point MACHINED on one end. The other end
shall be welded into a hole drilled in the pipe at an angle of 82° C to the horizontal, the
leading 50mm from the point shall be bent upwards at an angle of 45 deg. The back of
each rod must be pushed up against the back of the opposite side rod in the middle of the
pipe before being welded. Each set of holes must be drilled at 60 deg further around the
centre line of the preceding set.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth.
The finish is to be hot dip galvanized to specification.

1.44 200 LITRES HIDES WHEELBARROW

A standard flat bar wheelbarrow is required. The unit must have the following
modifications. All pipework is to be capped and sealed off by welding on end plates. The
tire must be solid and of acceptable material able to withstand the blood and other
corrosive matter found in an abattoir. The wheel bearing must be able to withstand the wet
working conditions.
All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

1.45 HORN AND LEG SAW

Client Supplied.

1.46 BRISKET SAW

Client supplied.

1.47 CARCASS SAW, BALANCER & RAIL

Client supplied.

1.48 CARCASS SPLITTING SAW STERILIZER

A Saw Sterilizer is to be supplied sized and shaped to suit the electric beef carcass splitting saw, leading dimensions should not exceed 300mm in width, 600mm deep at the back and 800mm long at the top with a sloping front face. The sterilizer shall be manufactured from not less than 1 mm steel suitably stiffened and reinforced along the top edge and all internal corners shall be minimum 25mm radiused. The unit shall be substantially mounted on tubular legs, two front legs on the platform, two back legs on the floor, the floor legs fitted with approved adjustable feet. The sterilizer shall be provided with a 100 dia dial thermometer, a hot (82°C) water inlet taken from the supply line below the isolation valve and union, an overflow connection set 40mm from the top connected directly to the 50 dia drain pipe after the ball valve, which drain pipe shall be led under the platform as close to a floor drain as possible. The unit shall be heated by means of a suitably sized bank of 3 x 1 kW elements with a built-in thermostat set to maintain the water at a steady 82°C. The whole installation shall be waterproofed to IP55.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All contact surfaces to have suitable Prostruct sealant inserted before final assembly. The sterilizer shall be compatible with the carcass splitting saw described in 1.49 above.

1.49 BRISKET SAW STERILIZER & S.S. WHB COMBINATION

A S.S. wash hand basin complete as specified in Clause 1.18 is required to be combined with a sterilizer generally as described in 1.18 above except that the shape of the sterilizer shall be oval in section having a 90 radius on each end with a 200mm long parallel section giving an oval 350 long and 180 wide, the depth of the unit shall be increased to 400mm to insure complete immersion of the saw blade when sterilizing.

A perforated plate suitably shaped shall also be provided to permit normal sterilization of knives and steels, this plate shall be attached to the sterilizer by means of a strong stainless-steel chain. The sterilizer shall be compatible with the client supplied brisket saw.
1.50 S.S. WASH HAND BASINS AND STERILIZERS

(TO BE OMITTED UNDER THIS PHASE)

Four wash hand basins and sterilizers are required under this clause complete in every respect as specified in clause 1.18.

1.51 STAINLESS STEEL HATCH LINERS

(TO BE OMITTED IN THIS CONTRACT)

Six wall penetration hatch liners are required to allow the different offals to be passed through the various division walls into the offal rooms. These units are to be manufactured to the sizes and details specified in the equipment drawings. All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The material is to be 304 stainless steel polished to a 180 grit finish on all of the exposed faces.

1.52 CATTLE PAUNCH TRAYS

A set of paunch holding trays are required to hold the cattle paunches during inspection. These trays shall have leading external dimensions of 850mm x 850mm x 200mm deep. The wall and floor thickness shall not be less than 8mm, all corners shall have a minimum of 25mm radius and the top edge shall be thickened to a minimum of 10mm and be formed into a returned lip which shall be reinforced in all four corners. The trays shall be roto moulded from polyethylene to a high standard of finish with a smooth, easy to clean, surface.

1.53 LOCKABLE CONDEMNED CONTAINER

A heavy walled drum type container of 450mm dia and 650mm high fitted with lifting handles moulded from polyethylene to a high standard of finish with a smooth easy to clean surface is required. The unit is to be fitted with a purpose made stainless steel lid so made as to be fully removable for cleaning purposes but able to be locked to the container when in use. The lid is to be fitted with a slot and internal slide so made as prevent material being removed from the drum. All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The lid is to be polished to a 180 grit finish.

1.54 STAINLESS STEEL WALL PENETRATION LINERS

(TO BE OMITTED IN THIS CONTRACT)

Eight wall penetration liners are required to allow service piping to pass through various walls to the offal and ablution rooms. It should be noted that these units do NOT require the internal CORNERS to be RADIUS ED.
All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The material is to be 304 stainless steel polished to a 180 grit finish on all of the exposed faces. A sample of such fabricated units shall be inspected and approved by the Service Engineer whose consent shall be needed before fabricating the remainder as per the approved sample.

**1.55 CARCASS WASH GUN AND HOSE - COLD**

A cold carcass wash is required at the wash platform comprising a hand-held wash gun which shall stop when released complete with 2000mm of reinforced hose fitted with a 'snap' coupling compatible with the unit on the cold-water supply point at support steel level above the platform (elsewhere measured). The length of the hose to be such that when hanging downwards the gun shall be at least 200mm above the floor.

**1.56 WASH GUN AND HOSE - 82 DEG C AT INSPECTION RACK**

A hot water (82 deg C) sterilizing wash is required at the red offal inspection ‘on rail’ rack comprising a hand-held wash gun, with protection from the heat, which shall stop when released complete with 2500mm of 'blue' high temperature food quality reinforced hose fitted with a 'snap' coupling compatible with the unit on the hot water supply point at support steel level above (elsewhere measured). The length of the hose to be such that when hanging downwards the gun shall be at least 200mm above the floor.

**1.57 STIMULATOR - LOW VOLTAGE (Prods)**

A low voltage stimulator is to be provided. The control unit shall be mounted on the division wall between bleeding and dressing in the bleeding area. The unit shall be a 'proprietary' make, have a proven service record and comprise the following:

A power supply control box of either 3CR12 or 304L stainless steel complete with earthing cable and stainless-steel spring-loaded nose probe of the type which opens up in the nostril without penetrating the skin, the whole unit is to be robustly designed to minimum IP55 standards.

The electrical parameters for the unit are as follows:

- **Pulse shape**: Uni directional pulses of DC  
- **Peak voltage**: 50 Volts with an average of 45 volts.  
- **Pulse width**: 2 milliseconds  
- **Pulse rate**: 40 per second  

Make and model numbers are to be stated in Part D.5
2. SHEEP/GOAT (SHOATS) DRESSING EQUIPMENT

GENERAL

2.1 THE SHOATS SLAUGHTER PROCESS

Small stock (shoats) shall be led into a restraining enclosure for stunning or ritual (halal) killing. The enclosure is then opened up by a set of gates to allow access to the stunned animals for shackling and hoisting onto the shoats bleeding rail using a shoats bleeding roller and a special sheep bleeding shackle designed to allow the lifting and bleeding of sheep on the bleeding rail system.

Once bled the sheep are moved to the transfer platform where they are singly transferred onto a dressing gambrel fixed to a skid hook sliding on a low-level dressing rail system which allows the bulk of the dressing operations to take place at floor level.

Fore feet and heads are removed prior to transfer while hind legs are removed during the transfer operation, all are placed on racks for inspection purposes prior to being passed into the head and foot room or appropriate storage as per abattoir drawing. Ageing shall take place before the head is removed and the carcass shall be 'button' marked.

The pelt is removed working from the top downwards while the carcass is moved along the rail. A platform is provided for easy reach of the rump for cropping of the bung and high pelting.

Once the pelt is backed down and dropped the carcass is washed to remove loose wool before being positioned in front of the evisceration table. The pelt is passed through a hatch or by wheelbarrows to the hide/pelt room as per abattoir drawing.

Goat/Sheep are eviscerated in batches of six and both the rough and the red offals are placed on the evisceration table in line with the carcass for inspection purposes, the paunches in trays and the pluck on a S.S. hook. Passed paunches are removed to the rough offal room, passed red offals are placed on ‘on rail’ carriers, hung on the dressing line, for removal to the chillers.

All condemned materials are placed in containers for removal to the suspect holding room. Passed carcasses are washed and allowed to drain off before they are transferred from the low level sheep dressing rail to 6 hook carrier logs, suspended from the high level transporter rail, for removal to the chillers.

2.2 STUNNING TRANSFORMER AND TONGS

The apparatus shall connect through an approved earth leakage relay to the regular 220 volt A.C. supply with an approved key-operated master switch to prevent unauthorised use, and shall consist of:

a) Stunning Transformer

An electrical control and transformer unit designed for well-mounting in a convenient position adjacent to the stunning area. The unit and any connections thereto must be water-proofed to IP65 standards against the ingress of water during wash-down, and comply with the appropriate by-laws and regulations governing the use of such apparatus.
The unit must be provided with voltage settings to enable alternative output voltages of 70, 90, 150, 220 and 330 volts to be selected, interlocked with a timing device to provide operating periods of a half and 3 seconds, but permitting the time to be extended indefinitely when operating on the lowest setting of 70 volts.

An approved key-operated gate must be provided beyond the 150 volt setting to ensure that operation at voltages above 150 volts can occur only under circumstances where authority for such operation has been given.

b) Stunning Tong

The tong shall be designed to be hand held by the operator and have a scissor action. The activating button shall be placed convenient to the right thumb on the right-hand handle and shall be water proof to IP65 standards. The tong heads shall comprise a set of serrated bronzed surfaces, screwed into the end of the tong handles and fully insulated from the tong handles in all respects. Protruding from this bronze head shall be a sharp bronze point 12mm dia and 20mm long tapering down to a point. The body of the tongs shall be manufactured from stainless steel tube full welded at all points where the tube connects to the centre pivot joints, the stunning heads and the handles.

The probe heads shall be set in the tong frame in such a way that when the tong is completely closed the heads shall not be more that 50mm apart. They shall not be able to contact each other under any circumstances. The tongs are to be provided with a length of coiled electrical cable which shall allow the operator to move freely in the stunning area, but coil itself up when the tongs are brought back and hung on their support bracket.

The Transformer, tongs, controls and connecting cables are to be water proofed and manufactured to IP65 standards.

c) Support Frame

A wall mounted support frame sized to hold the transformer and made with minimum 25mm upstand edges to prevent the transformer from falling off must be provided. The unit shall be four times bolted to the wall using M8 bolts. The frame shall be provided with a substantial hook suitably shaped and positioned to allow the stunning tongs to be safely hung up when not in use.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

2.3 SHOATS BLEEDING SHACKLE CHAINS

The shackle frame shall comprise a 12 dia MS rod, be fitted on the one end with a fixed ring sized to suite the cattle bleeding roller hooks. The rod length shall be sized, in conjunction with the chain length, to suite the levels required to present the loose hind leg in the correct height/level position for transfer to the dressing gambrel.

To the other end of the shackle frame a twist link chain shall be fitted which in turn shall end in a 40 dia shackle ring made from 6 dia MS. The chain length shall be 400mm.
All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

2.4 S.S. BLEEDING SHACKLE RETURN CHUTE

A 250 dia 3mm thick stainless steel 1500mm long chute is required to be built into the division wall between the sheep transfer station and the bleeding area. The loading end shall be cut back at an angle of 45 deg from the centre line upwards while the other end shall have the top half of the tube cut away for 500mm from the end, this end shall be capped up to the centre line. The edges of both ends shall be stiffened by having a 12 dia rod continuously welded all around the circumferences.

The chute shall be made to lie at angle of 15 deg sloping back towards the bleeding area and a drain hole shall be provided at the lower end. Two 500 x 500 x 3mm thick S.S. plates with edges folded towards the wall for stiffening shall be supplied, one of these plates shall be welded to the tube at an angle of 15 deg to the horizontal 800mm from the lower and while the other shall be supplied loose for fixing after the unit has been built in. Both plates shall be four times drilled for bolting to the wall.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant before final assembly. All surfaces shall be polished to 180 grit finish.

2.5 SHOATS DRESSING RAIL SUPPORT GRID STEELWORK

The shoats dressing rail support grid steel work shall be supplied by others.

2.6 SHOATS DRESSING RAIL SYSTEM

The rail system shall be supplied by others. This notwithstanding, the tenderer shall ensure all other accessories supplied by him and for use in this rail shall be compatible with the installed rail system and to County Engineer’s approval

2.7 SHOATS TRANSFER TO DRESSING RAIL PLATFORM

The platform shall be free standing and fitted with approved adjustable feet to take up floor slopes. Provision must be made in the design for the foot plate to be bolted to the floor if required. All fixing bolts are to be stainless steel and of the chemical anchor type.

The general form and manufacturing requirements shall be as specified in Clause 1.24, specific requirements are as follows:

One platform level is required:
450mm above the floor 800mm wide and 1,200mm long.

The platform shall have a WHB/S mounted on the back face.
2.8 SHOAT PELTING PLATFORM

The platform shall be free standing and fitted with approved adjustable feet to take up floor slopes. Provision must be made in the design for the foot plate to be bolted to the floor if required. All fixing bolts are to be stainless steel and of the chemical anchor type.

The general form and manufacturing requirements shall be as specified in Clause 1.24, specific requirements are as follows:

One platform level is required:
200mm above the floor 800mm wide and 1200mm long.

The platform shall be fitted with handrailing on the back side only.
2.9 CARCASS WASH SCREENS

Two wash screens are required manufactured from 2mm thick white nylon reinforced plastic screen, 1500mm wide and 2200mm high or equal and approved. The screens shall be folded over and seamed top and bottom to accept a 25mm dia steel pipe or bar for the full width of the curtain, the one at the bottom to act as a counterweight, the one at the top to project beyond the curtain and act as a mounting pivot which shall in turn be fixed to a 50mm dia mild steel medium walled pipe frame which shall be 3 times fixed at each end to the secondary grid, and so sized and made as to line the curtain level with the rail and 600mm off the centre line of the rail. The top of the curtain shall be set at a height of 2200mm above the floor.

The screen support frame and pivot/spreader bars/pipes to be made from mild steel. All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

2.10 CARCASS WASH GUN & HOSES

Two cold carcass wash stations are required comprising a hand-held wash gun which shall stop when released complete with 2000mm of reinforced hose fitted with a 'snap' coupling compatible with the unit on the cold-water supply point at support steel level above the wash stations (elsewhere measured).

2.11 SIX STATION EVISCERATION INSPECTION TABLE

An offal holding and inspection table is required comprising a tubular framed table made from 40 x 40 tubing suitably braced and stiffened and mounted on four legs fitted with approved adjustable feet which must be able to be bolted to the floor. The work surface shall be 2,000mm long and 600mm wide capable of holding six 560mm x 320mm plastic trays in separate and in place during loading and inspection, the top of the trays should be 900mm from the floor.

Along the back of the unit the two outer end legs must be extended upwards to form supports for a 40 NB pipe rail which shall be set 1600mm above the floor. Stainless steel 'S' hooks shall be hooked over this rail to hold the individual plucks separate and in line with their respective paunches during inspection. Once passed they shall be slid along the rail to the end of the table where they shall be removed for washing.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion.

2.12 ROUGH OFFAL INSPECTION TRAYS

A set of paunch holding trays are required to hold the sheep paunches during inspection. These trays shall have leading external dimensions of 560mm x 320mm x 150mm deep and a 25 lt capacity. The wall and floor thickness shall not be less than 6mm, all corners
shall have a minimum radius of 25mm and the top edge shall be thickened and be formed into a returned lip which shall be reinforced in all four corners.
The trays shall be roto moulded from polyethylene to a high standard of finish with a smooth easy to clean surface.

2.13 STAINLESS STEEL RED OFFAL HOOKS

Stainless steel red offal hooks are required to be formed from 8mm S.S. with hook radius at each end to suit outside dia of the 40 NB pipe rail of the inspection table but not less than 25mm. The hook radius centres shall not be less than 100mm. Each hook point shall be Machine finished to a taper of not more than 15 deg with the very point machined at an angle of 30 deg.
The whole hook shall be polished to a finish of not less than 180 grit.

2.14 RED OFFAL WASH CABINET & WASH GUN

The unit shall be made from a 400mm dished end ex 4mm MS which shall have a rolled back plate equal to half of the circumference welded to the back half of the dished end to form a back plate 400mm high. The edges of the back plate and the open half of the dished end shall be stiffened by having a 12 dia rod continuously along the whole length of the edge. The upstand of the dished end shall be such as to create a depth of not less than 100 at the deepest part. A loose removable 5mm thick MS perforated plate shall be mounted on four pegs welded to the sides of the dished trough set 50mm below the surface.
The unit shall be mounted on a 80 NB light wall pipe welded to the centre of the dished end. This pipe shall act as the drain for the unit and the dish outlet shall be the full dia of the pipe ID. The pipe shall be mounted on a triangular 12mm plate three times drilled with 18mm holes. This plate shall be set at not less than 80mm above the floor level and fixed on three 16 dia bolts with nuts under and on top of the plate to locate same. The length of the support shall be such that the perforated plate is set at a height of 900mm above the floor.
A coldwater wash gun complete with a 1,100mm length of flexible reinforced hose fixed to a 15mm outlet set into the side of the backplate is to be provided. The inlet pipe is to be provided with a union for connection to the service piping. The wash gun shall stop when the lever is released.
All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion.

2.15 SHOATS TRANSFER TO CARRIER LOG PLATFORM

The platform shall be free standing and fitted with approved adjustable feet to take up floor slopes. Provision must be made in the design for the foot plate to be bolted to the floor if required. All fixing bolts are to be stainless steel and of the chemical anchor type.
The general form and manufacturing requirements shall be as that of cattle fixed transfer platforms. Specific requirements are as follows:

One platform level is required:
400mm above the floor 800mm wide and 1,500mm long - requires one step.
The platform shall be fitted with handrailings on the back and leading short end side only.

**2.16 FEET CONTAINERS**

Two Proprietary make food grade white polyethylene plastic bins are to be provided fitted with suitable handles and lids. The units are to stand 650mm high be 470mm in dia tapering towards the bottom. The finish is to be smooth and easy to clean.

**2.17 HORN CONTAINERS**

One Proprietary made food grade white polyethylene plastic bin is to be provided fitted with suitable handles and lid. The unit are to stand 650mm high be 470mm in dia tapering towards the bottom. The finish is to be smooth and easy to clean.

**2.18 DRESSING GAMBREL CONTAINERS**

Two Proprietary make food grade white polyethylene plastic bins are to be provided fitted with suitable handles and lids. The units are to stand 650mm high be 470mm in dia tapering towards to bottom. The finish is to be smooth and easy to clean.

**2.19 SHOATS PAUNCH TRAY WASH AND STERILIZER**

The unit shall comprise a back plate 500mm wide and 900mm high with flanged sides to form deflectors. The floor shall be so made as to support the pan being washed and catch the wash water and guide it by means of a sloping floor to a 50 dia drain pipe which shall pass under the front dressing platform and led into the floor drain. The unit shall be made of 3mm mild steel with edges stiffened by means of an 18 dia bar continuously welded to the edge and be fitted with four legs fitted with approved adjustable feet. A substantial hook is to be provided on right side of the unit on which to hang the wash gun. The unit is positioned behind the cattle dehiding platform.

A hand held wash gun with thermal protection against hot water is to be provided complete with a 2000mm long reinforced ‘blue’ high temperature reinforced hose fitted with a ‘snap’ connector. The ‘snap’ connector shall be compatible with the outlet of the hot/cold combination wash point on the platform above the unit (elsewhere measured).

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.
2.20 PAUNCH TRAY WALL STORAGE RACK

(TO BE OMITTED IN THIS CONTRACT)

A wall mounted storage rack is to be fixed to the wall above the hide hatch. The unit is to be 2800 long and comprise two racks set at an angle to permit the storage of trays lying upside down at an angle of 30 deg off the wall.

Each rack shall be made from three 50 x 10 MS flats welded at an angle to three 300 long 70 x 10 MS mounting brackets each twice drilled for m16 bolts. The support frames shall be connected to each other by 4 x 1,400 long 18 dia rods set 8 to each complete rack.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

2.21 6 HOOK SHOATS CARRIER LOGS

(TO BE OMITTED IN THIS CONTRACT)

Carrier logs are required, each capable of carrying 6 sheep carcasses three on each side of a central 600 long frame supplied complete suspension rods of suitable length capable of attachment to a beef dressing trolley.

The logs shall consist of a 75 x 75mm MS angle iron frame with centralised 12 dia MS support eye for connection of the suspension rod. The log shall be fitted with six hooks set three per side and 300mm apart with a machined point suitably shaped and sized to accept both sheep legs from a single carcass.

The suspension rod shall be manufactured from 12mm dia MS round bar, provided with a 30 dia hook on one end and an open U form on the other with the return leg being 150mm long. The rod shall be so sized that the combined length of the rod and the log when hung from a dressing roller hook shall suspend the leg hooks 1800 above the floor.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

2.22 SHOATS DRESSING GAMBREL & SKID HOOKS

The dressing skid shall be made from 20 x 8 MS flat bar the top end of which shall be hot formed to fit freely over the 80 x 12 bleeding rail. The 12mm down turned tail shall be flared slightly to permit easy landing on the rail. The rail contact surface on the inside of the skid shall be dimpled downwards or formed to have a rounded inside surface which
shall offer a small contact surface to the rail. The bottom of the frame shall be turned to right angles and be drilled to suit a 10 dia riveted swivel eye.

A dressing gambrel must be connected to the eye of the swivel. The gambrel shall consist of two legs set at angle to each other and have a hook complete with sharp point at the end of each leg, the two legs shall be tied together by a brace set one third up the legs from the hooks to form a triangle. One leg shall be slightly longer than the other and the hook be so made that a sheep hind leg can be hung from the hook without the gambrel slipping or pulling out of the swivel eye. The second shorter leg shall have a shallower hook which shall allow a hind leg to be put onto the hook while the carcass load is taken up on the first hook. The effective centres of the two hooks shall not exceed 280mm.

Considerable care must be taken to ensure that the proximity and heights of the bleeding shackle and the dressing gambrel are such that a manual transfer of the carcass can take place after the feet have been removed and the gams punched.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

2.23 RED OFFAL ‘ON RAIL’ CARRIERS

(TO BE OMITTED IN THIS CONTRACT)

Three ‘on rail’ carriers are required under this clause equal in all respects to the units specified in clause 1.43 above.

2.24 WASH HAND BASIN & STERILIZERS

Three WHB/S are required equal in all respects to the units specified in clause 1.18 above.

2.25 HAND WASH TROUGH

A hand wash trough is required in the clean worker entrance passage comprised of a unit similar in construction to those described in clause 1.18 but larger in form.

The trough shall be 600mm x 350mm and oblong in form with 50mm radius corners which shall taper on a square to round basis down to the drain/support pipe. A matching back plate must be provided. No sterilizer is required.

The unit shall be provided with two sets of spray nozzles and knee valves these being the same fittings and finishes and in all other respects be as specified in clause 1.18 above.

2.26 BOOT WASH WITH BRUSH AND HOSE

A boot wash unit is required in the clean workers entrance. The unit shall be the same as that described in clause 1.17 in all respects.
3.0 CHILLER AND LOAD OUT AREA

3.1 TRANSPORTER, CHILLER & DISPATCH RAIL SYSTEM

This item is supplied and installed by others. However, tenders must allow for matching of their equipment that are to be used in this rail to the rail system installed.

3.2 ELECTRONIC LOADCELL SCALE

An electronic scale is to be installed at the end of the cold marshalling passage just before the first switch to the marshalling area. The scale shall be of the loadcell type connected to a display unit which shall be mounted to the column above the tally table in the centre of the room.

The weigh bar must be designed to suit the installed rail system (by others). The gap between the weigh rail end and the fixed rail end shall not exceed 4mm per side. The weigh bar shall be connected through the loadcell unit to the display panel where the following information and characteristics must be incorporated into the unit:

- LED display minimum 5 digits
- Gross and Nett weight indications
- Keyboard to set and programme unit
- Tare memory storage and display
- Zero setting device
- Provision to be coupled to a 'printout unit'
- Maximum capacity 750 kg
- Display in tenths of 1 kg

The unit is to be water proof to IP65 standards and the cabinets and mountings shall be of a finish which can withstand the highly corrosive atmosphere in which it shall have to operate.

Tenders shall clearly state make and type of unit offered and supply full details of the maintenance and backup to the client once the unit is commissioned.

3.3 STAINLESS STEEL TALLY TABLE

One working surface are required. The units shall be made of 2mm thick 304 stainless steel with the back face turned up 100mm, the two sides turned up 25mm and the front turned up 12mm. All sharp edges are to be removed and all surfaces shall be polished to a 180 grit finish.

The unit shall be 900 long x 400 wide and be fitted to the division wall between the loadout and sterilizing rooms.

The unit shall be mounted on a suitable mild steel tubular frame which shall be four times bolted to the wall. All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be HD galvanized.
3.4 WASH HAND BASIN SAW STERILIZER COMBINATION

(TO BE OMITTED IN THIS CONTRACT)

A wash hand basin complete as specified in clause 1.18 is required to be combined with a sterilizer generally as described in 1.18 above except that the shape of the sterilizer shall be oval in section having a 75 radius on each end to be 150 wide and 250mm long to accommodate the quartering saw, the depth of the unit shall be increased to 400mm to insure complete immersion of the saw and the handle when sterilizing.

A perforated plate suitably shaped shall also be provided to permit normal sterilization of knives and steels, this plate shall be attached to the sterilizer by means of a strong stainless steel chain.

4.0 HEAD, FOOT & HORN EQUIPMENT

(TO BE OMITTED IN THIS CONTRACT)

4.1 HEAD AND FOOT RECEIVING TABLES

Two tables are required, the one to be parallel and the other to be 'L' shaped. The tables to be fitted one into each of the two hatches leading into the room from the dressing floor. The table tops shall comprise a 3CR12 tray 1050mm long 500mm wide and 70mm deep with ALL corners radiused 25mm, the L shaped unit shall have a 850mm leg. The edges shall be stiffened by having a 12mm dia rod continuously welded all around the circumference.

600mm of the unit shall project into the room and at this point a 80mm x 400mm long plate shall be welded on the bottom of the tray to act as a stop. At a distance equal to the size of the S.S. hatch plus 20mm forward of the first stop plate another plate shall be similarly welded into position, all edges and corners shall be smoothed off. In this way the table shall be located and supported on the front end.

Two 40 x 40 tubular legs set 100mm from the back face of the tray and suitably braced, stiffened and fitted with approved adjustable feet shall be welded to the underside of the tray to support the back of the unit.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary, all welds shall be passivated. All surfaces shall be polished to a 180 grit finish.

4.2 WASH HAND BASIN ONLY

One wash hand basin only is required under this clause all as specified in clause 1.18 above.

4.3 WASH GUN/HOSE/REEL - COLD

A hand held cold water wash gun is to be provided complete with a 12 dia 4000 long reinforced flexible hose fitted with a 'snap' connector. The 'snap' connector shall be
compatible with the outlet of the cold wash point on the wall between the hatches (elsewhere measured).

An open four spoke hose reel made from 18 dia mounted on a four times M10 bolted 350mm x 350mm x 10mm MS wall plate is to be fixed to the wall at a level 1600mm above the floor.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

4.4 **HORN CONTAINER**

One Proprietary make food grade white polyethylene plastic bin is to be provided fitted with suitable handles and lid. The unit is to stand 650mm high be 470mm in dia tapering towards the bottom. The finish is to be smooth and easy to clean.

4.5 **BOOT WASH WITH BRUSH AND HOSE**

A boot wash complete in all details as clause 1.179 above is to be installed.
5.0 HIDE & PELT ROOM  

(TO BE OMITTED IN THIS CONTRACT)

5.1 WASH GUN

A hand held cold water wash gun is to be provided complete with a 12mm dia 4000mm long reinforced flexible hose fitted with a ‘snap’ connector. The ‘snap’ connector shall be compatible with the outlet of the cold wash point on the wall next to the hatch (elsewhere measured).

An open four spoke hose reel made from 18mm dia MS mounted on a four times M10 bolted 350mm x 350mm x 10mm MS wall plate is to be fixed to the wall at a level 1600 above the floor.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

5.2 WASH HAND BASIN ONLY  

(TO BE OMITTED IN THIS CONTRACT)

One wash hand basin only is required under this clause all as specified in clause 1.18 above.

5.3 BOOT WASH WITH BRUSH AND HOSE  

(TO BE OMITTED IN THIS CONTRACT)

The unit shall be made from a 400mm dia dished end ex 4mm MS which shall have a rolled back plate equal to half of the circumference welded to the back half of the dished end, to form a back plate 400mm high. The edges of the back plate and the open half of the dished end shall be stiffened by having a 12mm dia rod continuously welded along the whole length of the edge. The upstand of the dished and shall be such as to create a depth of not less than 100 at the deepest part. A foot rest ex 25 pipe shall be fired across the centre line at the point where the back plate joins the dish, the top of the pipe shall fit in under the 12 dia stiffening edge.

The unit shall be mounted on a 80 NB light wall pipe welded to the centre of the dished end. This pipe shall act as the drain for the unit and the dish outlet shall be the full dia of the pipe ID. The pipe shall be mounted on a triangular 12mm plate three times drilled with 18mm holes. This plate shall be set at not less than 50mm above the floor level and fixed on three 16 dia SS bolts with nuts under and on top of the plate to locate same. The length of the support shall be such that the rest is set at 450mm above the floor.

A 1,000mm length of flexible reinforced 12mm cold water hose shall be provided connected to a 12mm dia supply pipe welded to the back plate on left hand side, this pipe shall be fitted with a lever actioned ball valve. The other end of the pipe at the back of the unit shall be turned upwards and fitted with a union suitable for connection to the cold
water service supply. A nylon brush with a plastic handle shall be provided and fixed to the right hand side of the unit by means of a suitable length of chain of non-corrosive material.

All welds are to be continuous, thoroughly chipped and cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. Incompatible materials are to be isolated by a neutral material to prevent galvanic corrosion.

5.4 '3 HOOK' APRON HOOK SETS

(TO BE OMITTED IN THIS CONTRACT)

'Three hook' wall mounted apron hooks are required. The unit shall comprise a 350mm long back plate made from 80 x 8 Ms flat bar twice drilled for M10 bolts. Three 70mm long hanging pegs made from 8mm dia MS machined round on the one end with the other end welded at an angle of 20 deg to the horizontal to the back plate at 75mm centres set 30mm up from the bottom of the plate.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

5.5 '8 HOOK' APRON HOOK SETS

(TO BE OMITTED IN THIS CONTRACT)

'Eight hook' wall mounted apron hooks are required. The unit shall comprise a 725mm long back plate made from 80 x 10 MS flat bar twice drilled for M10 bolts. Eight 70mm long handing pegs made from 8mm dia MS machined round on the one end with the other end welded at an angle of 20 deg to the horizontal to the back plate at 75mm centres set 30mm up from the bottom of the plate.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

6.0 PAUNCH EXTRACTION AND TRIPES CLEANING ROOM

General

The equipment in the paunch extraction and tripes cleaning room is required to receive the paunch from the dressing floor and process it through various cleaning phases namely:

Paunches

- Open up and separate lining, stomachs and intestines
- Pass stomachs on to have ingesta removed with light rinse
- Second Water two phase wash in Tip/Dunk wash under running
• Hung up to drain before removal

Intestines

Separated from the paunches and passed to stripping table where cleaning shall be by either:

• Being rough slashed and emptied under running water
• Separating the runners and hand stripping with running water
• Hung up to drain before removal

The paunch opening suite required to achieve this shall be made of three separate sections which when bolted together shall form one complete self-contained unit with table tops set approximately 800 above the finished floor. All surface slopes must be set at a minimum of 15 in 1,000 to permit complete draining to the opening grid from both ends. Pooling on the tables shall not be permitted. The unit shall be sized to stand 100mm off the walls to allow for cleaning.

6.1 PAUNCH RECEIVING TABLE - 3000 LONG

(CLIENT HAS SUPPLIED TERRAZO TOPS)

Table Top

The table top shall have effective internal dimensions of 3000mm long x 850mm wide and shall be made from 4mm thick 3CR12 steel having a trough section with the side walls standing up an average of 120mm from the table surface. The work surface shall be sloped to the bottom right hand corner to permit proper drainage. The edges of the table shall be returned twice to form an upside down channel section 40mm wide over the outside and be level with the floor at the point where the paunch slide to pass over the table top. Directly opposite this point the front upstand shall be increased in height to 200mm for the width of the opening to prevent tipped paunches falling off the table. The table may be made up in two parts for handling purposes, the joint shall be a suitable external 8 times M10 bolted flange connection complete with gasketing and sealant.

The end of the table connecting to the intestine table shall have a stiffened edge to allow for the 45 degrees sloped pass over the intestine table. At the opposite bottom right hand end the table shall be provided with a suitable external 8 times M10 bolted flange connection to the paunch opening table complete with gasketing and sealant.

Frame

The frame work shall be made from 40 x 40 rectangular tubing suitably braced and stiffened and be fitted with approved adjustable feet. The number of legs must be kept to a minimum. The unit shall be bolted to the table top by means of suitably located lugs welded to the top. Provision must be made for clearance for the intestine table drain pipe which shall pass under this table to the floor drain.
6.2 PAUNCH OPENING TABLE - 3800mm LONG

Table Top (THIS ITEM SHALL NOT BE PRICED CLIENT HAS SUPPLIED TERRASO WORK TOPS)

The table top shall have effective internal leading dimensions of 2000mm long x 850mm wide and shall be made from 4mm thick 3CR12 steel having a trough section with the side walls standing up an average of 120 from the table surface. The work surface shall be sloped from either side to the opening grid to permit proper drainage. The edges of the table shall be returned twice to form an upside down channel section 40mm wide and be level with the floor. The back upstand shall be increased in height to 450mm above the table top for the length of the opening grid. Two cold water pipes must be provided with hose connections on the table face and single action ball valves and unions on the upstanding inlet ends shall be set into the back plate 1,000mm apart, 300mm above the table top and equal about the centre of the opening grid.

At each end the table shall be provided with three suitable external 8 times M10 bolted flange connections to the paunch receiving table, ingesta slide and Tip/Dunk tables complete with gasketing and sealant.

At a point 500mm from the left hand side of the table a 1000mm long and 750mm wide tundish shall be provided with sides sloping 15 deg to a 100 dia drain pipe which shall terminate 150mm above the spoon drain running underneath the table. An opening grid shall be provided to the top of the tundish comprising a rectangular with 60 x 60 effective openings, the grid shall fit flush with the table top.

Inside the tundish a set of guide plates shall be provided which shall guide the ingesta to the top of the 400 wide ingesta dewatering conveyor belt. The lower 100mm of the sloped sides shall be made of perforated plate on three sides, while the side leading to the conveyor entrance shall be open.

Frame

The frame work shall be made from 40 x 40 rectangular tubing suitably braced and stiffened and be fitted with approved adjustable feet. The number of legs must be kept to a minimum. The unit shall be bolted to the table top by means of suitably located lugs welded to the top. Provision must be made for clearance for the Tip/Dunk table drain pipe which shall pass under this table to the floor drain.

6.8 WASH GUN AND HOSE SETS - COLD

Four hand held cold water wash tapered pipe nozzles suitable for insertion into intestines are to be provided, each complete with a 12mm dia 1500mm long reinforced flexible hose fitted to the hose connection pipe on the intestine table.

Two hand held cold water pipe nozzles suitable for the washing of ingesta from the intestines and tripes are to be provided each complete with a 12mm dia 800mm long reinforced flexible hose fitted to the hose connection pipe on the back plate of the paunch opening table.

All necessary hose clamps and fittings of non-corrosive materials are to be provided.
6.9 SINGLE BOOT WASH WITH BRUSH & HOSE

(TO BE OMITTED IN THIS CONTRACT)

A boot wash unit is required in the rough offal room. The unit shall be as described in clause 1.17 above in all respects.

6.10 WASH HAND BASIN & STERILIZER

(TO BE OMITTED IN THIS CONTRACT)

One wash hand basin and sterilizer is required under this clause all as specified in clause 1.18 above.

6.11 PLASTIC OFFAL BINS

Four Proprietary make food grade white polyethylene plastic bins are to be provided fitted with suitable handles, lid, two integral wheels and pushing handle. The unit is to stand approximately 1,000mm high be 600mm square tapering towards the bottom. The finish is to be smooth and easy to clean, all corners are to be radiused. The unit must be similar and equal to the 'Otto' unit.
7.0 SUSPECT HOLDING - CONDEMNED ROOM

7.1 PAUNCH TRAY HOLDING RACK

A rack capable of holding three paunch trays one above the other is to be provided. The unit must be sized to accommodate the paunch trays supplied under clause 1.55.

The rack shall be fabricated from 40 x 40 MS tube suitably braced and stiffened and be fitted with approved adjustable feet. All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All contact surfaces to have suitable Prostruct sealant inserted before final assembly. Once correctly positioned the unit is to be bolted to the floor.

7.2 PAUNCH TRAY WASH & STERILIZER

A sterilizer unit shall be provided with internal dimensions 900mm long x 250mm wide x 900 deep effective. The unit shall be substantially mounted on tubular legs fitted with approved adjustable feet. The sterilizer shall be provided with a 100mm dia dial thermometer, a hot (82°C) water inlet taken from the supply line below the isolation valve and union, an overflow connection set 40mm from the top connected directly to the 50 dia drain pipe after the ball valve, which drain pipe shall be led as close to a floor drain as possible.

The unit shall be heated by means of a suitably sized bank of 3 x 3kW elements = 9kW with a built-in thermostat set to maintain the water at a steady 82°C. The whole installation shall be water proofed to IP55.

The front of the sterilizer shall be provided with 250mm wide flanged sides to form deflectors connected to a sloped floor which shall be so made as to support the pan being washed and catch the wash water and guide it by means of a 50mm dia pipe to the nearest floor drain. The unit shall be made of 3mm thick mild steel with stiffened edges. A Spitz type wash gun and 1500mm long reinforced plastic hose fitted with a snap connector must be provided.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

All contact surfaces to have suitable Prostruct sealant inserted before final assembly. Once correctly positioned the unit shall be bolted to the floor. All fixing bolts are to be stainless steel and of the chemical anchor type.

7.3 1,200MM LONG WALL MOUNTED OFFAL HANGING RACK

A wall mounted hanging rack is required comprising two 1,200mm long 80 x 12 MS flat bars to each of which is welded 14 12mm dia meat hooks having a machined point formed to a 40mm radiused hook. These rail each to be welded to 50 NB pipes each in turn welded and gusseted to two 450mm long 80 x 12 wall mounting brackets each twice drilled for M12 bolts. The pipes are to be sized and spaced to provide two hanging rails, one 300 the other 150 off the wall set 300 apart the lowest being 800 above the FFL.
All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces to have suitable Prostruct sealant inserted before final assembly.

### 7.4 SINGLE BOOT WASH WITH BRUSH AND HOSE

A single boot wash unit is required under this clause the same in all respects to that described in clause 1.17 above.

### 7.5 WASH HAND BASIN AND STERILIZER

A wash hand basin is required under this clause the same in all respects to that described in clause 1.18 above.

### 7.6 1/4 TONNE CHAIN HOIST

A Proprietary make 1/4 tonne hand operated chain hoist is required to be positioned above the secondary steelwork (By others) at the end of the rail in the suspect holding room, the centre line of the chain must be set to clear the flanged of the steelwork. The rail under the centre line of the hoist must be offset from the centre of the grid sufficient to allow the SS hook to be fitted into the gam without interference from the steelwork.

A section of channel must be mounted toes above the offset rail to prevent the dressing roller from lifting from the rail when a hind is being lifted down.

The effective chain length must not be less than 4,000mm allowing a hind quarter to be lowered to the floor from the rail.

### 7.7 STAINLESS STEEL HOOK & HANDLE FOR 7.6 (NOT TO BE PRICED)

The standard hook of the hoist shall be amended by the Tenderer to facilitate lowering operations by the addition of 20 dia S.S. hook which shall fit onto the hoist hook and into the gam of the hind quarter, the shape shall be such that when the hoist is lowered the lifting hook shall slip out of the gam. The hook shall be hot formed and reinforced in the bend. A 1,200 long 16 dia rod with a T handle shall be welded to the hook to allow the operator to manipulate the hook from the floor when positioning it in the gam. All surfaces shall be polished to a 180 grit finish.
8.0 EQUIPMENT STERILIZER ROOM

8.1 EQUIPMENT STERILIZER SUITE

This unit shall be operated at rail level comprising three troughs creating three work stations of equipment lengths of 900mm each giving an overall unit length of 2,700mm with a width of 800mm. The two outer compartments shall be shallow 150mm deep troughs while the centre trough shall be 400mm deep. All corners in all three troughs shall be rounded with a radius of not less than 25mm. The floor of each trough shall slope at an angle of not less than 3 deg to a central 50 dia drain pipe fitted with a lever actioned ball valve. The unit shall have a back plate to height of 600mm above the lip of the troughs.

Three 12mm dia cold water pipes must be provided mounted on the back plate 400mm above the trough tops and equal about the centre line of each of the troughs. The two outer troughs must have a fitting suitable for the mounting a 1,200mm length of 12mm dia flexible hose which must also be provided. The central trough shall be fitted a substantial spigot set so as to deliver water directly into the back section of the trough. The water pipes are to be fitted with lever action ball valves on the upstanding inlet ends which in turn shall be connected to a single sparge pipe fitted with a union suitable for connection to the service pipes (elsewhere measured).

In the first trough a detergent/water mix shall be used to hand clean loose material and fat from the equipment.

In the second trough all items of equipment shall be sterilized by immersion in 84+ deg C water for two minutes. The sterilizer, with internal dimensions 900 long x 600 wide x 400 deep effective, shall be provided with a 100 dia dial thermometer, a hot (82 deg C) water inlet taken from the supply line below the isolation valve and union, an overflow connection set 40mm from the top, the pipe shall be led as close to a floor drain as possible. A removable protective grid must be fitted just above the looped heater pipe.

The unit shall be heated by means of a suitably sized double bank of 3 x 3kW elements = 18kW with a built-in thermostat set to maintain the water at a steady 82 deg C. The whole installation shall be waterproofed to IP55.

In the third trough the equipment shall be cooled down by being sprayed with cold water before being placed back on the rail or stored on one of the equipment racks.

A suitable platform complete with handrail and ladder shall be provided at a height to allow the equipment to be comfortably removed and replaced on the rails. The general standard and finish shall be as specified for the operator’s platforms on the dressing floor.

The whole unit shall be mounted on a set of 50 x 50 x 3mm tubular legs suitably braced, stiffened and fitted with approved adjustable feet. All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

8.2 3,500MM WALL RACK AND PROTECTIVE PLATE

An aluminium chequer plate at least 6mm thick and 1,000mm high x 3500mm long must be mounted onto the wall directly under the wall rack and be so positioned that the
swinging shackles, chains, gambrels etc cannot come in contact with the wall when stored on the storage rail.

All fixing bolts to be of stainless steel - chemical anchor type and bolt projection shall be properly dressed off flush with the nut. Before the plate is bolted into position the plate shall be prepared with Prostruct sealant in such a way that when the bolts area pulled down the sealant shall be squeezed out. The residue shall be cleaned off leaving a smooth radius between the plate and the wall.

The storage rack shall be 60 x 18 Ms flat bar, drilled if required for mounting brackets. The rack shall be designed to withstand a load of 200 kg/metre and be fitted with stops on each end. At least four mounting brackets made up of plate sections pitched at centres a maximum of 1,100mm apart must be provided and either bolted or welded to the rail. The brackets shall have a back plate which shall each be three times bolted to the wall. Prostruct sealant shall be applied when the plates are mounted. Finish is to be hot dipped galvanized to specification. All fixing bolts to be of stainless steel - chemical anchor type. Incompatible materials are to be separated by a neutral material to prevent galvanic action.

The rack shall be sand blasted and coated with an approved edible oil. On completion of the erection and prior to trial slaughter all rails shall be cleaned of all rust etc and recoated with approved edible oil.

8.3 LOG STORAGE PIPE FRAME

A storage frame made from 35 NB heavy wall piping and comprising two 3,000mm long parallel pipes set 380mm apart by not less than three cross members. The whole to be set 350mm above the floor and stand on three legs per side and be fitted with approved adjustable feet.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification.

NOTE

The tenderers attention is drawn to the fact that the rail system in this area shall remain at 3,500mm to allow the removal and replacement of the rollers on the dressing rails from the platform.
9.0 HOT, WARM AND COLD WATER SERVICES
(THIS SERVICE WILL BE BY OTHERS)

GENERAL
The primary and secondary water services do not form part of this contract. Tenderers wishing to tender for this section of the works must draw separate documents dealing with the services installation.

The works included in this contract consist of the supply and installation only of the wash down stations and hoses as described below:

9.1 HOT/COLD WATER STATIONS AND HOSE REELS
Hot/Cold wash down points are required at various positions around the abattoir. Each wash down point shall comprise two supply legs, one a 20mm dia hot water (82° C) feed pipe and one 20mm diameter cold water feed pipe both terminating 1,500 above the floor with a lever action ball valve with suitable high temperature seals and a compression fitting. From the fitting each leg shall be fitted with a non-return valve and then turn through a right-angle bend and be connected to common tee.

The single leg of the tee shall be fitted with the female half of 'snap' connector made of suitable materials for operation under the high temperature and corrosive conditions.

The whole assembly shall be very substantially mounted to the reel mounting plate with no less than three fixings one on each leg above the isolation valve and the third between the tee and the 'snap' connection. The installation must be able to withstand the drag action which shall be imposed when the hoses are pulled away from the wall at right angles during use.

9.2 HOSE REELS
Open four spoke hose reels are required to be fixed on a common mounting plate with the nine wash points. Each hose reel shall be made from 18 dia MS mounted on a 600 x 350 x 10 MS wall plate which is four times M10 bolted to the wall at a level 1600 above the floor.

All welds are to be continuous, thoroughly chipped, cleaned down and ground smooth where necessary. The finish is to be hot dip galvanized to specification. All fixing bolts are to be stainless steel and of the chemical anchor type. All contact surfaces with the wall are to have suitable Prostruct sealant inserted before final assembly.

9.3 HIGH TEMPERATURE 'BLUE' FOOD QUALITY HOSES
The hot and cold washdown points are each to be fitted with a Blue Nitril reinforced rubber 20mm dia hose, non-marking and non-abrasive with an operating pressure of 11 bar at temperatures up to 82° C.

Each hose is to be 10 metres in length and fitted with the male end of a matching 'Snap-On and 'snap-off' connector which shall allow the same hose to be used for both hot and cold water application at any of the nine wash stations.
The connectors are to be manufactured from non-corrosive materials and be capable of withstanding temperatures of 82°C and pressures of 11 bar for long periods

9.4 **HIGH TEMPERATURE WASH GUNS FOR 9.3**

Each of the nine hoses (clause 9.3) is to be fitted with a proprietary make pistol grip spray gun. The unit is to have a substantial cast body protected by a rubber or plastic cover. Light pressure on the lever must provide a soft spray, full pressure a strong stream and be so made that the flow stops when the lever is released, the rate of flow must be capable of being regulated.

The complete assembly must be suitable for use in the abattoir environment and a high temperature (minimum 82 deg C).

9.5 **RECOMMENDED SPARES**

A schedule of recommended spares to be held at the abattoir is required. The items should be of the type not readily available but necessary to ensure the normal operation of the abattoir and be sufficient in number to cover any further breakdown while the first stock item used is being replaced.

Items should be listed under two headings:
- Fixed capital items
- Consumable items

Examples:
- Spares for the bleeding and various transfer hoist should be included under the first heading.
- Spare blades for the carcass saw should be included under the second heading.

The schedule is to be fully priced and submitted in the tender document and only the total is to be entered in the Bills of Quantities.

The Employer reserves the right to purchase all or part of the listed items.
10.0 MISCELLANEOUS ITEMS:

Note

The successful contractor shall be required to establish the average suitable sizes of the workers in the abattoir before placing orders for the various items of protective clothing called for under the following clauses.

The Employer may elect to purchase some or all of the items listed under clauses 10.1 - 10.13 direct from suppliers and the Tenderer shall have taken note of this at the time of tendering.

10.1 WHITE, YELLOW AND BROWN OVERALLS

A selection of Polyester overalls are required. Tenderer is to provide the following colours in a suitable range of sizes. Quantities shall be stated in the Bills of Quantities.

- White
- Yellow
- Brown
10.2 **WHITE DUST COATS/TROUSERS**

Three-quarter length Polyester dust coats (with removable buttons) and matching white trousers are to be supplied in a suitable range of sizes and quantities as per Bills of Quantities section.

10.3 **WHITE PLASTIC APRONS**

Supply food industry standard white reinforced plastic bib/aprons with neck string and waist tie strings. Quantities as per Bills of Quantities section.

10.4 **WHITE GUM BOOTS**

An approved grade of white gum boots with a suitable grip sole is required in a suitable range of sizes and quantities as per Bills of Quantities section.

10.5 **WHITE HARD HATS**

White hard hats with adjustable headbands are to be provided. Quantities as per Bills of Quantities section.

10.6 **FLAYING (SKINNING KNIVES)**

18 cm long flaying knives of a high standard are required. The blade, suitable shaped for the flaying of hides, shall be manufactured from a high quality chrome-molybdenum stainless steel suitably hardened and tempered to insure a long lasting cutting edge. The handles are to be made from a suitable sanitary plastic material shaped to fit the hand for comfortable operation. Quantities as per Bills of Quantities section.

10.7 **DRESSING KNIVES**

Under this clause three types of dressing knives are to be supplied:

- 21 cm long; 'butchers' knives
- 21 cm long 'steak' knives and
- 30 cm long 'steak' knives

The blades, suitably shaped for the dressing of carcasses, shall be manufactured from a high quality chrome-molybdenum stainless steel suitably hardened and tempered to insure a long lasting cutting edge. The handles are to be made from a suitable sanitary plastic material shaped to fit the hand for comfortable operation. See Bill of Quantities for the numbers.

10.8 **KNIFE SCABBARDS AND CHAINS**

A suitable shaped aluminium scabbard made in two parts, one slipping inside the other, complete with a stainless steel knife grip is required. Each unit is to be fitted with a stainless steel waist chain complete with spring fastening clip and sharpening steel support clip.
10.9 SHARPENING STEELS

Sharpening steels, made of a special chromium alloy steel, and having a uniform extra hard, highly magnetic 'regular cut' surface not damaging to the knife edge. The handles are to be made from a suitable sanitary plastic materials shaped to fit the hand and be complete with a SS ring.

10.10 HAND WASHING LIQUID SOAP

10 litres of an approved Proprietary brand liquid hand washing soap is to be provided. The contractor shall fill each of the WHB soap dispensers before the trial slaughter.

10.11 CLEANING CHEMICALS

The tenderer is to recommend suitable sterilizing and cleaning chemicals for use with the hot water cleaning system provided in the design. Tenderer is to provide for the first stocking of these chemicals under this clause and supply full details of the products and the suppliers who shall be called upon the supply future requirements.

10.12 SHOVELS, FORKS, RAKES, SQUEEGEES, BROOMS

The following items are required in standard proprietary form for various areas around the abattoir. See Bill of Quantities.

| Shovels | - large type |
| Forks | - large |
| Rakes | - large, metal Tyne |
| Squeegees | - rubber blade on metal |
| Brooms | - coarse industrial |
| Broom | - fine domestic |

10.13 OPERATOR TRAINING

Provision is to be made for the full training of the Employer's operating and the maintenance staff for the period immediately prior to and during the trial slaughter as well as for the first 4 weeks after the date of takeover. Skilled personal must be available on the site for the whole of this period.

Tenderers are reminded that their staff shall be fully responsible for ALL aspects of PLANT MAINTENANCE during this period.

10.14 OPERATING AND MAINTENANCE MANUALS

A detailed and comprehensive set of OPERATING & MAINTENANCE manuals must be provided and a firm price is to be submitted for the compilation of these manuals completed in terms of the Contract, the detailed specification and to the satisfaction of the Engineer.

The contractor is to supply 3 complete sets of Maintenance Manuals which are to be set out in such a manner that any new maintenance person, unfamiliar with that particular installation, or part thereof, shall be able to obtain the required information
with the least delay. It is a prerequisite that the manuals, when compiled, are up to date and 'As Built' NOT 'as designed'.

The format for each manual should be as follows:

- **First Fly Leaf:** Volume identification with contents of all volumes listed.
- **Second Fly Leaf:** Contents of that particular volume under sub-section A, B, C etc., including drawing numbers relative to that volume.
- **Third Fly Leaf:** List of suppliers with names, addresses, telephone numbers and telex numbers, and machinery which they supplied.
- **Fourth Fly Leaf:** A geographic guide covering the area relevant to the contents of that volume.

**Details of Plant & Machinery:**

A complete list of machinery and their spare parts is to be tabulated in this section. This list must be completed in such a manner that every item of every piece of plant can be positively identified for ordering replacements. Details of all spares and supplier information is to be presented in the format shown in annexure A.

Drawings are to be stored in plastic folders at the back of the manual.

**Geographical Guide**

It is required that a photostatically reduced plan of the various Works areas be used to form the basis of a geographical guide to various items of equipment in the different sections as listed in the manuals when made up.

For Example:

Cattle Bleeding Area - A photostat of one in two hundred layout of this area, simply showing a guide to hoists, motors, various items of equipment by the index number used on the spares schedule is required to be furnished.

**Language**

Notes and labels on equipment and proprietary equipment drawings are to be in the official language: **ENGLISH.** All other languages, foreign brochures etc are to be translated.

**Drawings**

a. **Reduced Size Drawings**

If reduced size drawings are included in the manual, then the full size drawings is to be supplied for maintenance purposes.

b. **Large Drawings In Manuals**

Where large drawings are included or enclosed in the manual, the drawings (larger than A2 size) are to be enclosed in a plastic cover which shall be bound into the manual. This plastic cover is to be such that the drawing can be slipped out of the cover with ease. The drawings are NOT to be bound into the manual in such a manner that the manual has to be opened up in order to remove the drawing for reference purposes.

c. **Working Drawings – A1 size**
A full set of clear A1 size working drawings with manufacturing dimensions is to be supplied with each set of manuals. These are required in order that spare parts may be machined for replacements without the machine having to be stripped in order to obtain measurements.

d. Drawings of Patent Machines
Example: pumps, centrifuges, hoists etc. The drawings of this type of machinery, with exploded views and parts numbered, is to be included in the Maintenance Manuals. They are to be sufficiently clear that any spare part for that machine may be ordered from its part number or code number and that the correct spare part shall be supplied.

e. Photographs
When the manual supplied by the manufacturer contains photographs showing how a particular machine is to be stripped or assembled, then that page is to be copied in such a manner that the photograph is clearly reproduced in detail.

Special Tools
Special tools for stripping or assembling any patent machine such as pumps, centrifuges, hoist, etc, are not only to be listed but are also to be supplied with that machine.

Special Maintenance Instructions
Where special maintenance instructions have been specified by the manufacturer of any machine, then these special instructions are to be included in the manuals in the relevant sections.

Certificates
Copies of all certificates shall be included in this manual. They are to cover whichever of the following items are applicable: -

a. Pressure Vessel Certificates
b. Hoist certificates
c. Hoisting Chain Certificates
d. Hoisting Wire Rope Certificates
e. Crane Certificates complete.
f. Dressing Trolley Test Certificate
g. All test certificates.
h. Chain Block certificates
i. Lifting Gear certificates
j. Water Meter Certificates (hot and cold)
k. Inspection certificates

Pressure Reducing Valves
Where pressure reducing valves are installed it is essential that the downstream pressure of each valve is listed in the Maintenance Manuals in the relevant section on the operating of the plant.

Lubrication
A lubrication schedule showing daily, weekly and monthly lubrication requirements is to be prepared. A complete list of the oils or greases used in each and every item of equipment is to be listed showing make, grade and whether edible oil or grease is supplied. This is to be in tabulated form.

**Penalty for Non Performance**

Penalty for Non-Performance on the part of the Contractor by virtue of non-delivery or submission of the operating and maintenance manuals:

The Engineer shall appoint a third party to undertake the compilation and presentation of the full set of manuals which in the Engineers opinion, are required to adequately describe the Works. The costs of this third party compilation of the manuals shall be for the account of the Contractor. This sum shall be deducted from monies owing to the Contractor at that time.

Should the Tenderer be in any doubt as to the Employers requirements he is requested to clarify any queries with the County Engineer.
11.0 CLIENT SUPPLIED EQUIPMENT
<table>
<thead>
<tr>
<th>ITEM NO</th>
<th>EQUIPMENT NAME</th>
<th>MAKE / MODEL</th>
<th>QTY</th>
<th>CONDITION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1</td>
<td>Knife Sterilizer</td>
<td>Unbranded, S/S, with 2.75kW heating element</td>
<td>5 No.</td>
<td>Good</td>
<td>Needs cold water inlet and electricity</td>
</tr>
<tr>
<td>11.2</td>
<td>Shackles</td>
<td>Unbranded, Mild Steel</td>
<td>12 No.</td>
<td>Badly rusted</td>
<td>Should be dissembled, cleaned and hot galvanized</td>
</tr>
<tr>
<td>11.3</td>
<td>Hand Wash Sinks</td>
<td>Unbranded, Stainless Steel</td>
<td>8 No.</td>
<td>Good</td>
<td>Used as they are</td>
</tr>
<tr>
<td>11.4</td>
<td>High Pressure Washing Machine</td>
<td>WASP Model WSP3100C</td>
<td>1 No.</td>
<td>Appears used</td>
<td>Has a much higher pressure rating than needed. Should be tested and serviced</td>
</tr>
<tr>
<td>11.5</td>
<td>Brisket Saw</td>
<td>Kentmaster, Model 500E</td>
<td>1 No.</td>
<td>New</td>
<td>Needs 3 ph electric connection</td>
</tr>
<tr>
<td>11.6</td>
<td>Balancer for Brisket Saw</td>
<td>Kentmaster 9411K, 60-70 Kg</td>
<td>1 No.</td>
<td>New</td>
<td>Ready for installation</td>
</tr>
<tr>
<td>11.7</td>
<td>Splitting Saw</td>
<td>Kentmaster Model 75</td>
<td>1 No.</td>
<td>New</td>
<td>Needs 3-Phase Electric connection</td>
</tr>
<tr>
<td>11.8</td>
<td>Balancer for Splitting Saw</td>
<td>Kentmaster 9403K, 30-40 Kg</td>
<td>1 No.</td>
<td>New</td>
<td>Ready for installation</td>
</tr>
<tr>
<td>11.9</td>
<td>Horn and Leg Cutter</td>
<td>Kentmaster, Model HC-7</td>
<td>1 No.</td>
<td>New</td>
<td>Ready for installation but needs suitable siting</td>
</tr>
<tr>
<td>11.20</td>
<td>Balancer for Horn and Leg Saw</td>
<td>Kentmaster 9365, 30-35 Kg</td>
<td>1 No.</td>
<td>New</td>
<td>Ready for installation</td>
</tr>
<tr>
<td>11.21</td>
<td>Power Unit for Horn and Leg Cutter</td>
<td>Kentmaster, HPP-1-A</td>
<td>1 No.</td>
<td>New</td>
<td>Needs proper siting and</td>
</tr>
<tr>
<td>Item No.</td>
<td>Description</td>
<td>Make</td>
<td>Quantity</td>
<td>Condition</td>
<td>Notes</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------</td>
<td>----------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>11.22</td>
<td>Connecting Kit for Dehider</td>
<td>Freund SD10</td>
<td>1 No.</td>
<td>New</td>
<td>Dehider not seen. Could be missing?</td>
</tr>
<tr>
<td>11.23</td>
<td>Load Cell for Weighing Platform (Digital Scale)</td>
<td>Avery Weigh-Tronix T203, 500Kg</td>
<td>1 No.</td>
<td>New</td>
<td>Some components for proper mount not seen</td>
</tr>
<tr>
<td>11.24</td>
<td>Display Unit for Load Cell</td>
<td>Avery Weigh-Tronix E1010</td>
<td>1 No.</td>
<td>New</td>
<td>Connectors and network cables required</td>
</tr>
<tr>
<td>11.25</td>
<td>Top Mount Crush Scale (Digital)</td>
<td>Salter Model LS300, 300 Kg</td>
<td>1 No.</td>
<td>New</td>
<td>Could be used for shoats. Proper mounting needed</td>
</tr>
<tr>
<td>11.26</td>
<td>Printer and Data Logger for Weigh Scales</td>
<td>GSC, KFW</td>
<td>1 No.</td>
<td>New</td>
<td>Network cabling and termination required</td>
</tr>
<tr>
<td>11.27</td>
<td>Analogue Scale</td>
<td>Salter, 200 Kg max</td>
<td>1 No.</td>
<td>New</td>
<td>Ready for use</td>
</tr>
<tr>
<td>11.28</td>
<td>Dehorning Knife</td>
<td>Unbranded</td>
<td>1 No.</td>
<td>Fair</td>
<td>Needs service</td>
</tr>
<tr>
<td>11.29</td>
<td>Hooks for shoats</td>
<td>Unbranded, Stainless steel</td>
<td>30 No</td>
<td>New</td>
<td>Ready for use</td>
</tr>
<tr>
<td>11.30</td>
<td>Sharpening Steel</td>
<td>Unbranded, Stainless steel</td>
<td>9 No</td>
<td>New</td>
<td>Ready for use</td>
</tr>
<tr>
<td>11.31</td>
<td>Stainless Steel Sheaths</td>
<td>Un-branded</td>
<td>10 No.</td>
<td>New</td>
<td>Ready for use</td>
</tr>
<tr>
<td>11.32</td>
<td>Flaying Knives</td>
<td>Microban ICEL 281.3441.16</td>
<td>18 No.</td>
<td>New</td>
<td>Ready for use</td>
</tr>
<tr>
<td>11.33</td>
<td>Stitching Knives</td>
<td>Unbranded</td>
<td>4 No.</td>
<td>New</td>
<td>Ready for use</td>
</tr>
<tr>
<td>11.34</td>
<td>Stainless Steel Buckets</td>
<td>Un-branded, 15L Stainless Steel</td>
<td>5 No.</td>
<td>New</td>
<td>Ready for use</td>
</tr>
<tr>
<td>11.35</td>
<td>Stainless Steel Wheelbarrow</td>
<td>Un-branded, Stainless Steel</td>
<td>6 No.</td>
<td>Good</td>
<td>Needs service</td>
</tr>
<tr>
<td>11.36</td>
<td>Spare Wheels for wheelbarrow</td>
<td>Rubber</td>
<td>2 No.</td>
<td>Good</td>
<td>Ok</td>
</tr>
</tbody>
</table>
## SECTION IX – BILLS OF QUANTITIES AND SCHEDULE OF UNIT RATES

This section is comprised of:

a) Special Notes  
b) Statement of Compliance  
c) Technical Schedule of Items to be supplied  
d) Schedule of Unit Rates  
e) Preliminaries and Bills of Quantities

<table>
<thead>
<tr>
<th>11.37</th>
<th>11.38</th>
<th>11.39</th>
<th>11.40</th>
<th>11.41</th>
<th>11.42</th>
<th>11.43</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gambrels for Cattle</strong></td>
<td><strong>Livestock inspection Crush</strong></td>
<td><strong>Stunning Pen (Built Insitu)</strong></td>
<td><strong>Air Compressor</strong></td>
<td><strong>Meat Inspection Racks</strong></td>
<td><strong>Cattle Skinning Cradle</strong></td>
<td><strong>Hooves Trimmer</strong></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>Mild Steel, painted</td>
<td>Masonry with other Mild Steel components</td>
<td>Rencomp, Type SB4/C-270-V80</td>
<td>Stainless Steel, 6 hooks per row x 4 rows</td>
<td>Stainless Steel, on metal wheels</td>
<td>Unknown</td>
</tr>
<tr>
<td>2 No.</td>
<td>1 No.</td>
<td>1 No.</td>
<td>1 No.</td>
<td>2 No.</td>
<td>2 No.</td>
<td>3 No.</td>
</tr>
<tr>
<td>New</td>
<td>Fair</td>
<td>Poor</td>
<td>New</td>
<td>New</td>
<td>Fair</td>
<td>Unknown</td>
</tr>
<tr>
<td><strong>Ok</strong></td>
<td>Requires testing, servicing and customisation</td>
<td>Poorly done, esp. Mild Steel components. Requires redesign and reinstallaion</td>
<td>Needs testing</td>
<td>Ok</td>
<td>Wheels rusted, Needs service</td>
<td></td>
</tr>
</tbody>
</table>

Comment [J.M.O.J1]:
1.0 SPECIAL NOTES

1. The Bills of Quantities form part of the Contract documents and are to be read in conjunction with the contract drawings and general specifications of materials and works.

2. The prices quoted shall be deemed to include for all obligations under the Contract including but not limited to supply of materials, labour, delivery to site, storage on site, installation, testing, commissioning and all taxes (including \(16\%\) VAT).

In accordance with Government policy, \(3\%\) Withholding Tax shall be deducted from all payments made to the Tenderer, and the same shall be forwarded to the Kenya Revenue Authority (KRA).

3. All prices omitted from any item, section or part of the Bills of Quantities shall be deemed to have been included to another item, section or part thereof.

4. The brief description of the items given in the Bills of Quantities are for the purpose of establishing a standard to which the Contractor shall adhere. Otherwise alternative brands of equal and approved quality shall be accepted.

Should the Contractor install any material not specified here in before receiving written approval from the Project Manager, the Contractor shall remove the material in question and, at his own cost, install the proper material.

5. The grand total of prices in the price summary page must be carried forward to the Form of Tender for the tender to be deemed valid.
6. Tenderers must enclose, together with their submitted tenders, detailed
manufacturer’s Brochures detailing Technical Literature and specifications on all the
equipment they intend to offer.

2.0 STATEMENT OF COMPLIANCE

   a) I confirm compliance of all clauses of the General Conditions, General Specifications
      and Particular Specifications in this tender.

   b) I confirm I have not made and shall not make any payment to any person, which can
      be
      perceived as an inducement to win this tender.

Signed: …………………………………….for and on behalf of the Tenderer

Date: ……………………..

Official Rubber Stamp: …………………………………………………
3.0 TECHNICAL SCHEDULE OF ITEMS TO BE SUPPLIED

3.1 General Notes to the Tenderer

1.1 The tenderer shall submit technical schedules for all materials and equipment upon which he has based his tender sum.

1.2 The tenderer shall also submit separate comprehensive descriptive and performance details for all plant apparatus and fittings described in the technical schedules. Manufacturer’s literature shall be accepted. Failure to comply with this may have his tender disqualified.

1.3 Completion of the technical schedule shall not relieve the Contractor from complying with the requirements of the specifications except as may be approved by the Engineer.
4.0: TECHNICAL SCHEDULE

The tenderer must complete in full the technical schedule. Apart from the information required in the technical schedule, the tenderer MUST SUBMIT comprehensive manufacturer’s technical brochures and performance details for all items listed in this schedule (fill forms attached).

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>MANUFACTURER</th>
<th>COUNTRY OF ORIGIN</th>
<th>REMARKS (Catalogue No. etc.)</th>
</tr>
</thead>
</table>
Catalogues must be attached for all the items in the schedule of material above
## 5.0 SCHEDULE OF UNIT RATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>KSHS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.0 PRELIMINARIES

A) PRICING OF PRELIMINARIES ITEMS.

Prices shall be inserted against item of preliminaries in the Contractor’s Bills of Quantities and specification. These Bills are designated as Bill 1 in this Section. Where the Contractor fails to insert his price in any item he shall be deemed to have made adequate provision for this on various items in the Bills of Quantities. The preliminaries form part of this contract and together with other Bills of Quantities covers for the costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.

The Bills of Quantities are divided generally into three sections:-

a. Preliminaries – No. Bill 1
Contractors preliminaries are as per those described in section C – Contractor preliminaries and conditions of contractor. The Contractor shall study the conditions and make provision to cover their cost in this Bill. The number of preliminary items to be priced by the Tenderer has been limited to tangible items such as site office, temporary works and others. However the Tenderer is free to include and price any other items he deems necessary taking into consideration conditions he is likely to encounter on site.

b. Installation Items – Other Bills
   i. The brief description of the items in these Bills of Quantities should in no way modify or supersede the detailed descriptions in the contract Drawings, conditions of contract and specifications.
   ii. The unit of measurements and observations are as per those described in the Bills of quantities the section

c. Summary
The summary contains tabulation of the separate parts of the Bills of Quantities carried forward with provisional sum, contingencies and any prime cost sums included. The Contract shall insert his totals and enter his grand total tender sum in the space provided below the summary.

This grand total tender sum shall be entered in the Form of Tender provided elsewhere in this document.
### BILL NO. 1 PRELIMINARIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Discrepancies clause 1.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Conditions of Contract Agreement clause 1.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Payments clause 1.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Site location clause 1.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Scope of Contract Works clause 1.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Extent of the Contractor’s Duties clause 1.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Firm price contract clause 1.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Variation clause 1.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Prime cost and provisional sum clause 1.14 (insert profit and attendance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>which is a percentage of expended PC or provisional sum.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Bond clause 1.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Government Legislation and Regulations clause 1.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Import Duty and Value Added Tax clause 1.17 (Note this clause applies for</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>materials supplied only. VAT shall also be paid by the Contractor as</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>allowed in the summary page)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insurance company Fees clause 1.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Provision of services by the Main contractor clause 1.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Samples and Materials Generally clause 1.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED TO PAGE 145**
### BILL NO. 1 PRELIMINARIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Supplies clause 1.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Bills of Quantities clause 1.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Contractor’s Office in Kenya clause 1.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Builder’s Work clause 1.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Setting to work and Regulating system clause 1.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Identification of plant components clause 1.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Working Drawings clause 1.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Record Drawings (As Installed) and Instructions clause 1.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Maintenance Manual clause 1.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Hand over clause 1.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Painting clause 1.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Testing and Inspection – manufactured plant clause 1.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Testing and Inspection – Installation clause 1.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Storage of Materials clause 1.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Initial Maintenance clause 1.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED TO PAGE - 145**
## BILL NO. 1 PRELIMINARIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Attendance Upon Tradesmen, etc. (Insert percentage only) clause 1.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Local and other Authorities notices and fees clause 1.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Temporary Works clause 1.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Patent Rights clause 1.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Mobilization and Demobilization Clause 1.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Extended Preliminaries Clause 1.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Supervision by Engineer and Site Meetings Clause 1.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Allow for profit and Attendance for the above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Amendment to Scope of Contract Works Clause 1.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Contractor Obligation and Employers Obligation Clause 1.69(see appendix page C-24)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal brought forward from page 143</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal brought forward from page 144</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL FOR BILL NO. 1- PRELIMINARIES CARRIED FORWARD TO PRICE MAIN SUMMARY PAGE 165</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**BILL NO.2**

**CLIENT SUPPLIED EQUIPMENT**

**General Notes on client supplied items:**
Tenderers shall satisfy themselves as to the condition of the client supplied items by visiting the site or other such storage locations where such items are located and obtaining all necessary relevant information to their own satisfaction.

It shall be the responsibility of the tenderer to ensure that proper allowance is made for any and all necessary accessories for the proper functioning of the client supplied items. These shall include but not limited to connectors, bolts, anchors, power cords, chains, mounting plates, screws, brackets, sealants etc.

Tenderers shall be responsible for safe handling and storage of the client supplied equipment upto and including installation time, testing and commissioning of the said items.

In the pricing, tenderers shall fully allowing for taking (from client premises), delivery, installation, testing and commissioning of the mentioned client supplied equipment.

Tenderers shall also allow for 6 months maintenance period on the client supplied equipment as well as other Process Equipment, during which the tenderer shall supply all necessary spares, lubricants, etc that is necessary for maintaining the equipment in their proper functioning state.

Where such client supplied equipment require service before, during or after installation to ensure their proper functioning, it shall be the tenderer's responsibility to do so.

Description of client supplied equipment is included in the tender documents. However, it shall be the responsibility of the tenderer to verify accuracy and sufficiency of such information and to substantiate the given description where necessary.

Builder's work associated with client supplied items shall be by others.

Reticulation of Electrical and Mechanical services upto the nearest terminal point to where the equipment is to be installed shall be provided by others.
Where such client supplied equipment require networking or integration with other IT systems, tenderers shall allow for making such equipment ready for connection to or receiving such necessary service. This shall include but not limited to supplying and installing the necessary network terminals, plugs, sockets, etc that would allow for integration of the installed equipment to the IT system.

Location of the client supplied items shall be as per the tender drawings or as determined by the Services Engineer on site.

Take, deliver, install, test and commission the following client supplied items including all necessary accessories and parts for their proper functioning:

**1.0 Client Supplied Equipment**

**Brisket Saw-available**

1.1 Electric Brisket saw as 'Kentmaster, Model 500E'. The saw, located on site shall be complete with the following:
   a) 3-phase electric motor 380V x 3ph x 50Hz, 2.5A, 1 HP
   b) 1 No. x 300mm long saw blade
   c) 32A Industrial Socket and Plug

The saw shall be of 36Kg net weight and shall be suspended appropriately by use of a saw balancer as here below.

**Balancer for Brisket Saw-available**

Saw balancer as 'Kentmaster', Model 9411K of load capacity 60-70 Kg and net weight 25.6 kg. Item serial number is 005636. Allowance shall be made for extra chain necessary for sufficient free movement of the saw suspended by this saw balancer for ease of use by the operator around the carcass.
### Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir, West Pokot

**Jan 2021**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3</td>
<td>Carcass Splitting Saw-<strong>available</strong></td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electric Carcass splitting saw as 'Kentmaster', model 75 complete with a 3-phase electric motor capacity 380V, 3.7A, 2HP. Item serial number is 18053. The saw shall be suspended by means of a saw balancer in Item 1.4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Balancer for Carcass Splitting Saw-<strong>available</strong></td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Saw balancer as 'Kentmaster', Model 9403K of load capacity 30-40 Kg and net weight 21.1 kg. Item serial number is 002016. Allowance shall be made for extra chain necessary for sufficient free movement of the saw suspended by this saw balancer for ease of use by the operator around the carcass.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Horn and Leg Cutter-<strong>available</strong></td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horn and Leg cutter as 'Kentmaster', model HC-7 of net weight 26 Kg and operated using compressed air of inlet pressure 6.2Bars. The saw shall be suspended to the process rail support structure by means of a saw balancer. The saw shall be complete with its power unit as 'Kentmaster HPP-1-A' and saw balancer as 'Kentmaster' model 9365 and capacity 30-35 Kg. The power unit, measuring approximately 114Kg net weight, shall be mounted on the process rail support structure (done by others) in such a way as to necessitate free movement of the saw within the area of operation and within radius of 5m while at the lowest operating platform. Mounting of the power unit shall ensure no vibration is transferred to the support structure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Connecting Kit for Carcass Dehider-<strong>available</strong></td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Connecting Kit for compressed-air-operated dehider (described elsewhere in the BoQ) including Air Filter and Dryer, 5m hose, couplings, 1L oil bottle, grease for maintenance, fasteners and hose clips. The item shall be as 'Freund SD10. Art No. 050001005'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED TO PAGE 153**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7</td>
<td><strong>Load Cell for Live animal Weighing Platform / Crush</strong>&lt;br&gt;Avery Weigh-Tronix T203 load cell of capacity 500Kg, Class C4 and Serial No. 50652010. Tenderers shall allow for mounting of this item on and integration with Cattle Inspection Crush (described here below). The load cell shall be bottom mount beneath the Crush with proper top and bottom mounting plates, connecting rods, beams, stainless steel bolts, etc so as to facilitate its accurate and reliable measurement of the weight of a live animal restrained within the crush. Tenderers shall allow for customization of the Cattle Inspection Crush to receive the load cell and for the Load Cell's connection to a display unit and printer (both described below and remotely located from the crush). Any necessary Civil Works will be by others. However, the tenderer shall ensure suitability of such works, bases, foundation, concrete, railings etc for the proper mounting of the load cell and the Crush.</td>
<td>1</td>
<td>No.</td>
<td>1.9</td>
<td>6</td>
</tr>
<tr>
<td>1.8</td>
<td><strong>Display Unit for above Load Cell</strong>&lt;br&gt;Avery Weigh-Tronix E1010 display unit, SNo. 111650638 complete with a mounting bracket, 13A x 3 Pin top plug and AC to DC adaptor. The item shall be connected to the above mentioned load cell but shall be remotely located not more than 20m from the load cell. Tenderers shall allow for connection of this display unit to a Printer and Data Logger as described here below.</td>
<td>1</td>
<td>No.</td>
<td>1.9</td>
<td>7</td>
</tr>
<tr>
<td>1.9</td>
<td><strong>Printer and Data Logger for Scales</strong>&lt;br&gt;The printer and data logger is as GSC model KFW complete with an AC/DC adaptor. The power plug for the printer shall be provided with IP65 protection including the socket outlet. The printer shall be located in an appropriate room as shall be determined on site and shall be installed so as to accommodate input from at least 3 scales display units located remote from the printer</td>
<td>1</td>
<td>No.</td>
<td>1.9</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Carcass dehider</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED TO PAGE 153**
### Tender for Abattoir Equipment for Proposed Nasukuta Export Abattoir, West Pokot

#### Jan 2021

### Page 151 of 192

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.10</td>
<td><strong>Top Mount Digital Scale for Shoats</strong>&lt;br&gt;Salter LS300 digital scale of load capacity 300kg complete with display unit, battery and 2 Pin AC/DC adaptor and plug. The scale shall be mounted so as to measure live weight of stationary or moving small stock (sheep or goats) within a crush (described elsewhere in the Bills of Quantities). This scale shall be connected to a remotely sited Printer and Data Logger as described above.</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.11</td>
<td><strong>Cattle Inspection Crush</strong>&lt;br&gt;The inspection crush is made of Mild Steel construction with appropriate paint finish. It is of robust construction, capable of handling one animal at a time during inspection and weighing. The Crush shall be installed in the Large Stock Raceway as per Service Engineers instructions and shall incorporate a load cell (described in Item 1.8) for measurement of live cattle while in a restrained position. Tenderers to allow for any necessary service and / or modification to the client supplied crush to make it fit for use.</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.12</td>
<td><strong>Meat Weighing Scale-available</strong>&lt;br&gt;Suspended analogue scale as Avery Tronix 235 10X manufactured by SALTER; Maximum Load capacity 200 Kg; 254mm dia. dial housed in ABS plastic. The scale is complete with test loads for calibration purposes.</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.13</td>
<td><strong>Air Compressor-available</strong>&lt;br&gt;Air Compressor for (Item 1.6) is Rencomp, Type SB4/C-270-V80, SNo. 8042488 : Year manufactured – 2008; FAD – 520 L/min ; 3 phase, 400V, 50 Hz, 6.1 Amps; Noise level 39 dB, complete with storage tank. The compressor will be located in an Equipment Room. Tenderers shall allow for all other accessories required for proper functioning of the compressor and for delivery of the right quality of air needed by the process equipment serviced by this compressor.</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED TO PAGE 153**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.14</td>
<td><strong>High Pressure Washing Machine-add 1 for alternative use</strong>&lt;br&gt;WASP, Model QL-3100C pressure washing machine for general cleaning of the abattoir floors, walls etc. The machine has 2 wheels with the following properties: Working pressure – 13 Mpa; Maximum; Water Inlet pressure – 0.3 Mpa; Maximum Operating temperature – 60°C; Noise level – 97 dB; Power rating 2 Kw, Single phase complete with 2 Pin x 13 A top plug and 20mm dia water inlet hose with female BSP threaded connector</td>
<td>5</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.15</td>
<td><strong>Knives Sterilizer-available</strong>&lt;br&gt;Stainless Steel bucket type with 2.75kW single phase electric heating element; 1/2” male BSP threaded water inlet; overall dimensions 330mm deep x 175mm Long x 150mm wide c/w 13A x 3 Pin fused top plug</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.16</td>
<td><strong>Dehorning Knife</strong>&lt;br&gt;Manual dehorning knife for shoats are made of mild steel</td>
<td>18</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.17</td>
<td><strong>Flaying Knives</strong>&lt;br&gt;Microban ICEL 281.3441.16 flaying knives are made of High Carbon Steel</td>
<td>4</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.18</td>
<td><strong>Sticking Knives</strong>&lt;br&gt;Sticking knives are made of High Carbon Steel</td>
<td>5</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.19</td>
<td><strong>Stainless Steel Buckets-available</strong>&lt;br&gt;15L capacity stainless steel buckets</td>
<td>9</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.20</td>
<td><strong>Sharpening Steel-available</strong>&lt;br&gt;Knife sharpening steel made from 10mm dia x 300mm long stainless steel rod complete with 140mm long ABS plastic handle</td>
<td>6</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.21</td>
<td><strong>Stainless Steel Wheel-barrows-available</strong>&lt;br&gt;Made of stainless steel, 850mm long at the top and 670mm long at the bottom, 600mm wide and 220mm deep on 1 wheel. The wheel barrows are complete with 2 No spare wheels.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED TO PAGE 153**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.22</td>
<td>Gambrels</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Made of 5mm thick S/S flat bar : 900mm long : 105mm wide : complete with 80mm dia S/S Ring for hanging.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.23</td>
<td>Sheath for Knives and Sharpener-available</td>
<td>10</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Made of stainless steel, approximately 120 wide at the top with S/S chain and 3 rings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.24</td>
<td>Hooks for Shoats</td>
<td>30</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Made of 5mm thick Stainless Steel rod, total height 190mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.25</td>
<td>Wash Hand Basins-available</td>
<td>8</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stainless steel Single bowl wash hand basin with no drainer. Overall dimensions 490mm long x 430mm wide and 160mm deep; Bowl size – 130mm deep with 50mm dia waste water outlet at the bottom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.26</td>
<td>Meat Inspection Rack</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stainless Steel meat inspection racks complete with 2 rows of hooks on either side with each row containing 6 hooks. The racks are approximately 1520mm long with the legs set at 560mm apart on the floor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.27</td>
<td>Cattle Skinning Cradle-available</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stainless Steel cradle on 100mm dia x 4 No. metal wheels. The cradle has an overall dimensions 1535mm long x 560mm wide on one end and approximately 480mm wide on the other end. Average height of the cradle is 200mm while on wheels.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED TO PAGE 153**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COLLECTION PAGE FOR CLIENT SUPPLIED EQUIPMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PAGE 147</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PAGE 148</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PAGE 149</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PAGE 150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PAGE 151</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PAGE 152</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL FOR BILL NO.2 - CLIENT SUPPLIED EQUIPMENT
C/F TO SUMMARY PAGE 163
### BILL NO.3

**SUPPLY AND INSTALL NEW EQUIPMENT**

All equipment under this section shall be 'Supply and Install' whereby the contractor shall supply, deliver, install, test and commission the said equipment to the satisfaction of the Engineer. Named brands are for reference as to the expected quality. The contractor may indicate an equivalent brand but which will be first approved by the Service Engineer before delivery to site. Any alternative brand suggested must be compatible with the existing client supplied equipment above. Clauses indicated refer to The Technical Specifications.

**CATTELL:**

Supply, deliver, install, test and commission the following according to the corresponding Clauses in the Technical Specification Document - D2:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>Drop Bottom Stunning Pen - Clause 1.3</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>Dry Landing Frame - Clause 1.4</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td>Bleeding Hoist / Landing Plate - Clause 1.5</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5</td>
<td>Bleeding Rail Assembly - Clause 1.7</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6</td>
<td>Bleeding Return Rail Assembly - Clause 1.8</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A7</td>
<td>Bleeding Roller Lowerator - Clause 1.9</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A8</td>
<td>Stainless Steel wall protecting pipework - Clause 1.10</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED FORWARD TO NEXT PAGE 155**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE 154</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A9</td>
<td>Wall protector plate - Clause 1.11</td>
<td>1</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A10</td>
<td>Bleeding rollers and shackles for Bi-rail system - Clause 1.13</td>
<td>8</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A11</td>
<td>Penetrative Stunning Bolt with 3,000 pieces of blank catridges - Clause 1.14</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A12</td>
<td>Blood and Water Drain valve including piping - Clause 1.15</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A13</td>
<td>Blood pump, hose and sump cover complete with sump plug - Clause 1.16</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A14</td>
<td>Boot wash units - Clause 1.17</td>
<td>8</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A15</td>
<td>Stainless steel Washhand basin attached to sterilizer quoted - Clause 1.18</td>
<td>12</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A16</td>
<td>Transfer Hoist (bleeding to dressing rail)- Clause 1.21</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A17</td>
<td>Transfer and Backdressing platform - Clause 1.22</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A18</td>
<td>Front dressing platform - Clause 1.23</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A19</td>
<td>Evisceration Platform - Clause 1.24</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A20</td>
<td>Carcass Splitting platform - Clause 1.25</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A21</td>
<td>General Platform - Clause 1.26</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A22</td>
<td>Carcass Wash Platform - Clause 1.27</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A23</td>
<td>Head washing and demask cabinet - Clause 1.28</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A24</td>
<td>Four Part head and foot inspection rack - Clause 1.29</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A25</td>
<td>Stainless Steel Hind foot chute - Clause 1.30</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED FORWARD TO NEXT PAGE 156**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A26</td>
<td>Stainless Steel trimming chute - Clause 1.31</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A27</td>
<td>Foot and Trimmings bins - Clause 1.32</td>
<td>4</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A28</td>
<td>Paunch tray wash and sterilizer including washing hoesreeel and gun (Shower nozzles) - Clause 1.33</td>
<td>10</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A29</td>
<td>Paunch Tray Wall storage rack - Clause 1.34</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A30</td>
<td>Red offal inspection rail - Clause 1.35</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A31</td>
<td>Red offal inspection rack - Clause 1.36</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A32</td>
<td>Carcass Chip Screen - Clause 1.37</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A33</td>
<td>Carcass Wash Screen - Clause 1.38</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A34</td>
<td>Stainless Steel carcass spreader bars - Clause 1.39</td>
<td>8</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A35</td>
<td>Dressing rollers - Clause 1.40 to fit dressing rail installed by others</td>
<td>320</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A36</td>
<td>Dressing roller push rods - Clause 1.41</td>
<td>4</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A37</td>
<td>Push rod hanging hooks - Clause 1.42</td>
<td>3</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A38</td>
<td>Red offal 'On Rail' Carriers - Clause 1.43</td>
<td>10</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A39</td>
<td>200 Litres Hides barrow - Clause 1.44</td>
<td>3</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A40</td>
<td>Carcass Saw Sterilizer - Clause 1.48</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A41</td>
<td>Brisket Saw Sterilizer and Wash Hand Basin - Clause 1.49</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A42</td>
<td>Cattle Paunch Trays - Clause 1.52</td>
<td>8</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A43</td>
<td>Lockable Condemned Container - Clause 1.53</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED FORWARD TO NEXT PAGE 157**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A44</td>
<td>Carcass Wash Gun and Hose for use with Cold Water - Clause 1.55</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A45</td>
<td>Carcass Wash Gun and Hose for use with 82°C water at Carcass inspection rack - Clause 1.56</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A46</td>
<td>Low Voltage Stimulator Prode, complete - Clause 1.57</td>
<td></td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A47</td>
<td><strong>Post Mortem Room</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post mortem Cradle plus support structure</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A48</td>
<td>Post mortem stainless steel knives</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A49</td>
<td>Standard Bio-hazard bags</td>
<td>24</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A50</td>
<td>Post mortem kit</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A51</td>
<td>Skul cutting saw</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A52</td>
<td>Knives sterilizers</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A53</td>
<td>2m long x 1m wide x 1m high stainless steel table</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL FOR CATTLE C/F TO BILL NO.2 COLLECTION PAGE 164**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td><strong>SHEEP / GOAT LINE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>Stunning Transformer and Tongs - Clause 2.2</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>Bleeding Shackle chains - Clause 2.3</td>
<td>10</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>Bleeding Shackle return chute - Clause 2.4</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>Transfer to dressing rail platform - Clause 2.8</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td>Shoats Pelting Platform - Clause 2.9</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B6</td>
<td>Carcass Wash Screen - Clause 2.10</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B7</td>
<td>Carcass Wash Gun &amp; Hose - Clause 2.11</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B8</td>
<td>Six-Station Evisceration Inspection table- Clause 2.12</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B9</td>
<td>Rough Offal Inspection Trays - Clause 2.13</td>
<td>12</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B10</td>
<td>Red Offal Hooks - Clause 2.14</td>
<td>12</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B11</td>
<td>Red Offal Wash Cabinet and Gun - Clause 2.15</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B12</td>
<td>Transfer to Carrier Log Platform - Clause 2.16</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B13</td>
<td>Feet Containers - Clause 2.17</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B14</td>
<td>Horn Containers - Clause 2.18</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B16</td>
<td>Dressing Gambrel Containers - Clause 2.19</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B17</td>
<td>Paunch Tray Wash and Sterilizer - Clause 2.20</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B18</td>
<td>Paunch Tray Wall storage rack - Clause 2.21</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B19</td>
<td>Six - Hook Carrier Logs - Clause 2.22</td>
<td>10</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL CARRIED FORWARD TO NEXT PAGE 159**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B20</td>
<td>Dressing Gambrel and Skid Hooks - Clause 2.23</td>
<td>70</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B21</td>
<td>Red Offal 'On Rail' Carriers - Clause 2.24</td>
<td>10</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B22</td>
<td>Wash Hand Basin and Sterilizer - Clause 2.25</td>
<td>4</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B23</td>
<td>Stainless Steel Hand wash trough - Clause 2.26 complete with 3 No. sensor operated taps</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B24</td>
<td>Boot Wash with Brush and Hose - Clause 2.27</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE 158**

**TOTAL FOR SHEEP / GOAT DRESSING EQUIPMENT C/F TO BILL NO.3 COLLECTION PAGE 164**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td><strong>OTHER EQUIPMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>Electronic Load Cell scale and printer set - Clause 3.2</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>Stainless Steel Tally Table - Clause 3.3</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>Wash Hand Basin and Quartering Saw Sterilizer combination - 3.4</td>
<td>1</td>
<td>Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4</td>
<td>Additional Stainless Steel Hooks for shoats, to match client-supplied ones</td>
<td>20</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td><strong>HEAD, FOOT AND HORN HANDLING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>Head Wall racks, 3200mm long - Clause 4.1</td>
<td>4</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>Feet Wall Racks - Clause 4.2</td>
<td>4</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>Head and Foot Receiving Tables - Clause 4.3</td>
<td>2</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D4</td>
<td>Wash Hand Basin - Clause 4.4</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D5</td>
<td>Boot Wash with Brush and Hose - Clause 4.7</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL FOR HEAD, FOOT AND HORN HANDLING AND OTHER EQUIPMENT C/F TO BILL NO.3 COLLECTION PAGE**
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>HIDE AND PELT HANDLING EQUIPMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E1</td>
<td>Three-Hook Apron Hook Set - Clause 5.4</td>
<td>5</td>
<td>Sets</td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>Eight-Hook Apron Hook set - Clause 5.5</td>
<td>2</td>
<td>Sets</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL FOR HIDE, PELT AND PAUNCH EXTRACTION C/F TO BILL NO.3 COLLECTION PAGE 164
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>SUSPECT CHILLER - OFFAL HANDLING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1</td>
<td>Paunch tray holding rack - Clause 7.1</td>
<td>1</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>G2</td>
<td>Paunch Tray Wash and Sterilizer - Clause 7.2</td>
<td>1</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>G3</td>
<td>Wall mounted offal hanging rack - Clause 7.3</td>
<td>1</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>G4</td>
<td>Single Boot Wash with Brush and Hose - Clause 7.4</td>
<td>1</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>G5</td>
<td>Wash Hand Basin and Sterilizer - Clause 7.5</td>
<td>1</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>EQUIPMENT STERILIZATION ROOM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1</td>
<td>Equipment Sterilizer Suite - Clause 8.1</td>
<td>1</td>
<td>Set</td>
<td></td>
</tr>
<tr>
<td>H2</td>
<td>Wall rack and protective plate - Clause 8.2</td>
<td>1</td>
<td>Set</td>
<td></td>
</tr>
<tr>
<td>H3</td>
<td>Log storage pipe frame - Clause 8.3</td>
<td>2</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>GENERAL WASHING AREAS (HOT, COLD AND WARM WATER)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I1</td>
<td>Hose Reels - Clause 9.2</td>
<td>9</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>I2</td>
<td>High Temperature 'Blue' Food Quality Hoses - Clause 9.3</td>
<td>9</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>I3</td>
<td>High Temperature Wash Guns for Food Quality Hoses - Clause 9.4</td>
<td>9</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>I4</td>
<td>Recommended spares - Clause 9.5</td>
<td>2</td>
<td>Sets</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL FOR SUSPECT RM, STERILIZATION AND GENERAL WASHING C/F TO BILL NO.3 COLLECTION PAGE 164
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1</td>
<td>Dressing Knives - Clause 10.7</td>
<td>16</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J2</td>
<td>Knife scarbbards and Chains - Clause 10.8</td>
<td>20</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J3</td>
<td>Double Decker Metal Lockers - Clause 10.12</td>
<td>10</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J4</td>
<td>A set of shovel, rake, squeegee, coarse industrial broom and fine domestic broom - Clause 10.13</td>
<td>10</td>
<td>Sets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J5</td>
<td>Polyester overalls – Clause 10.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>White Colour</td>
<td>20</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yellow Colour</td>
<td>30</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brown Colour</td>
<td>50</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J6</td>
<td>Boots (Sizes to be determined by the Contractor)</td>
<td>100</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J7</td>
<td>Electric Rechargeable Cattle Prods</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J8</td>
<td>Live Cattle Weighing Crush to be used with Load Cell in Bill No. 3 - Item 1.7</td>
<td>1</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J9</td>
<td>Live Cattle Weighing Crush to be used with Load Cell in Bill No.3 - Item 1.10</td>
<td>1</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J10</td>
<td>OPERATOR TRAINING - Clause 10.16</td>
<td>1</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J11</td>
<td>OPERATING AND MAINTENANCE MANUAL - Clause 10.17</td>
<td>1</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL FOR MISCELLANEOUS ITEMS C/F TO BILL NO.3 COLLECTION PAGE 164
<table>
<thead>
<tr>
<th>ITEM Description</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLLECTION PAGE FOR BILL NO.3 - SUPPLY AND INSTALL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Cattle Dressing Equipment brought forward from Page 157</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Sheep / Goat Dressing Equipment brought forward from Page 159</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Head, Foot &amp; Horn handling and other equipment brought forward from Page 160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Hide, Pelt and Paunch Extraction Equipment brought forward from Page 161</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Suspect Rm, Equipment Sterilization and General Washing Equipment brought forward from Page 162</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Miscellaneous Equipment brought forward from Page 163</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL FOR BILL NO.3 - SUPPLY AND INSTALL C/F TO SUMMARY PAGE 165
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>RATE</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY PAGE FOR ABATTOIR EQUIPMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Preliminaries - Bill No.1 Brought forward from Page 145</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Client Supplied equipment (Take, install, test and commission) - Bill No.2 Brought forward from Page 164</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Supply and Install Equipment - Bill No.3 Brought forward from Page 164</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency sum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200,000.00</td>
</tr>
</tbody>
</table>

TOTAL FOR ABATTOIR EQUIPMENT C/F TO FORM OF TENDER
SECTION X: STANDARDS FORMS

(i) Letter of Acceptance

(ii) Form of Agreement

(iii) Performance Bank Guarantee

(iv) Bank Guarantee for Advance Payment

(v) Qualification Information

(vi) Tender Questionnaire

(xi) Confidential Business Questionnaire

(vii) Statement of Foreign Currency Requirement

(x) Details of Contractors

(viii) Request for Review Form

Statement of Compliance form
1.0 SCHEDULE OF CONTRACT DRAWINGS

(SEE ATTACHED SCHEMATIC DRAWING)
LETTER OF NOTIFICATION OF AWARD

Address of Procuring Entity……………………………………………………………………
………………………………………………………………………………………………………………
To:………………………………………………………………………………………………………
P.O Box……………………………………………………………………………………………………
………………………………………………………………………………………………………………
RE: Tender No…………………………………………………………………………………………
   Tender Name…………………………………………………………………………………………
   This is to notify that the Contract/s stated below under the above mentioned tender have
   been awarded to you.

………………………………………………………………………………………………………………
1. Please acknowledge receipt of this letter of notification signifying your acceptance.

2. The contract/contracts shall be signed by the parties within 30 days of the date of this
   letter but not earlier than 14 days from the date of the letter.

3. You may contact the officer(s) whose particulars appear below on the subject matter
   of this letter of notification of award.

   (FULL
   PARTICULARS)……………………………………………………………………………………

SIGNED FOR ACCOUNTING OFFICER
LETTER OF ACCEPTANCE [LETTERHEAD PAPER OF THE EMPLOYER]

Date: [Date]

To: [Name of the Contractor]

[Address of the Contractor]

Dear Sir,

This is to notify you that your Tender dated [Tender Date] for the execution of [Contract Name] [Contract Identification Number] for the Contract Price of Kshs. [Contract Price in Figures] [Contract Price in Words] in accordance with the Instructions to Tenderers is hereby accepted.

You are hereby instructed to proceed with the execution of the said Works in accordance with the Contract documents.

Authorized Signature

Name and Title of Signatory

Attachment: Agreement
FORM OF AGREEMENT

THIS AGREEMENT, made the ......................... day of .....................................20…….

Between............................................................of [or whose registered office is
situated
at]............................................................hereinafter called “the Employer”)
of the one part AND
............................................................of [or whose
registered office is situated at]
(Hereinafter called “the Contractor”) of the other part.

WHEREAS THE Employer is desirous that the Contractor executes

............................................................
(Name and identification number of Contract)(Hereinafter called “the Works”) located
at ............................................................ [Place/location of the Works] and the

Employer has accepted the tender submitted by the Contractor for the execution and

completion of such Works and the remedying of any defects therein for the Contract

Price of Kshs...........................................(Amount in figures),

Kenya Shillings............................................... (Amount in words)

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are
respectedly assigned to them in the Conditions of Contract hereinafter referred to.

2. The following documents shall be deemed to form and shall be read and construed as
part of this Agreement i.e.
   (i) Letter of Acceptance
   (ii) Form of Tender
   (iii) Conditions of Contract Part I
   (iv) Conditions of Contract Part II and Appendix to Conditions of Contract
   (v) Specifications
(vi) Drawings

(vii) Priced Bills of Quantities

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The common Seal of
…...........................................................................................................
Was hereunto affixed in the presence of
…...........................................................................................................
Signed Sealed, and Delivered by the said….........................................................

Binding Signature of Employer................................................................................

Binding Signature of Contractor..............................................................................

In the presence of

(i) Name..............................................................

Address........................................................................

Signature........................................................................

[ii] Name........................................................................

Address........................................................................

Signature........................................................................
PERFORMANCE BANK GUARANTEE

To: The Chief Officer
Department of Pastoral Economy
COUNTY GOVERNMENT OF WEST POKOT
P.O Box 314-30600, Kapenguria, Kenya

Dear Sir,

WHEREAS ………………………………………. (Hereinafter called “the Contractor”) has undertaken, in pursuance of Contract No. ………………………… dated ………………… to execute………………………………………………..……………… (Hereinafter called “the Works”);

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of: Kshs. ……………….(Amount of Guarantee in figures)
Kenya Shillings …………………………………………………………………………
(Amount of Guarantee in words),
and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings ………(Amount of Guarantee in words) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any change, addition, or modification.

This guarantee shall be valid until the date of issue of the Certificate of Completion.

SIGNATURE AND SEAL OF THE GUARANTOR

Name of Bank………………………………………………………………………
Address……………………………………………………………………………
Date ………………………………………………………………………………

Jan 2021
BANK GUARANTEE FOR ADVANCE PAYMENT

To: ..........................................................................................................................................

[Name of Employer]  (Date)

............................................................................................................................... [Address of Employer]

Gentlemen,

Ref: [name of Contract]

In accordance with the provisions of the Conditions of Contract of the above-mentioned Contract, We, [name and Address of Contractor], (hereinafter called “the Contractor”) shall deposit with.................................................................................................................................[Name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Contract in an amount of Kshs. [Amount of Guarantee in figures] Kenya Shillings [Amount of Guarantee in words]

We, [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligor and not as Surety merely, the payment to [Name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs [Amount of Guarantee in figures]

Kenya Shillings..................................................................................................................

[Amount of Guarantee in words], such amount to be reduced periodically by the amounts recovered by you from the proceeds of the Contract.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between [Name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

No drawing may be made by you under this guarantee until we have received notice in writing from you that an advance payment of the amount listed above has been paid to the Contractor pursuant to the Contract.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until (Name of Employer) receives full payment of the same amount from the Contract. Yours faithfully,

Signature and Seal..................................................................................................................
CONFIDENTIAL BUSINESS QUESTIONNAIRE

You are requested to give the particulars indicated in Part 1 and either Part 2 (a), 2 (b) or 2(c) and (2d) whichever applies to your type of business.

You are advised that it is a serious offence to give false information on this Form.

Part 1 – General

Business Name ………………………………………………………….. Location of business premises: Country/Town…………… Plot No…………………………………… Street/Road …………………… Postal Address……………………… Tel No………………………… Nature of Business…………………………………………………………….. Current Trade Licence No……….. Expiring date………………

Maximum value of business which you can handle at any time:

Kenya Shillings……………………………………………………….. Name of your bankers………………………………………………………

Branch……………………………………………………….. Part 2 (a)

– Sole Proprietor

Your name in full……………………………………………………….. Age…..

Nationality……………… Country of Origin……………………

Citizenship details …………………………………………………

Part 2 (b) – Partnership

Give details of partners as follows:

<table>
<thead>
<tr>
<th>Name in full</th>
<th>Nationality</th>
<th>Citizenship Details</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. …………………………………. ………………… ………………………………

Part 2(c) – Registered Company

Private or Public …………………………………………………………. State the
nominal and issued capita of the company:

Nominal KShs……………… Issued KShs……………………

Give details of all directors as follows:

<table>
<thead>
<tr>
<th>Name in full</th>
<th>Nationality</th>
<th>Citizenship Details*</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td>………</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td>………</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td>………</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td>………</td>
</tr>
</tbody>
</table>

Part 2(d) Interest in the Firm:

Is there any person/persons in the employment of COUNTY GOVERNMENT OF WEST
POKOT WHO has interest in this firm? Yes/No ……… (Delete as necessary)

I certify that the above information is correct.

………… Title ………………… Signature …………… Date

* Attach proof of citizenship
TENDER QUESTIONNAIRE

Please fill in block letters.

1. Full names of tenderer

2. Full address of tenderer to which tender correspondence is to be sent (unless an agent has been appointed below)

3. Telephone number(s) of tenderer

4. Telex address of tenderer

5. Name of tenderer’s representative to be contacted on matters of the tender during the tender period

6. Details of tenderer’s nominated agent (if any) to receive tender notices. This is essential if the tenderer does not have his registered address in Kenya (Name, Address, telephone, telex)

Signature of Tenderer

Make copy and deliver to: ____________________________

(Name of Employer)
STATEMENT OF FOREIGN CURRENCY REQUIREMENTS (NOT APPLICABLE)

(See Clause 23] of the Conditions of Contract)

In the event of our Tender for the execution of…………………………………………………………………………………………………………………………………………………
...(Name of Contract) being accepted, we would require in accordance with Clause 21 of the Conditions of Contract, which is attached hereto, the following percentage: (Figures)…………………(Words)…………………………………… of the Contract Sum, (Less Fluctuations) to be paid in foreign currency.

Currency in which foreign exchange element is required:

Date: The ........... day of ........................................ 20............

Enter 0% (zero percent) if no payment shall be made in foreign currency.

Maximum foreign currency requirement shall be………………….(Percent) of the Contract Sum, less Fluctuations.

...........................................................................................................................................

(Signature of Tenderer)
DETAILS OF CONTRACTORS

If the Tenderer wishes to sublet any portions of the Works under any heading, he must give below details of the Contractors he intends to employ for each portion.

Failure to comply with this requirement may invalidate the tender.

(1) Portion of Works to be sublet:……………………………………………………………………

[i] Full name of Contractor and address of head office:………………………………………………

(ii) Contractor’s experience of similar works carried out in the last 5 years with Contract value:


(2) Portion of Works to be sublet:……………………………………………………………………

[i] Full name of Contractor and address of head office:………………………………………………

[ii] Contractor’s experience of similar works carried out in the last 5 years with Contract value:


[Signature of Tenderer] 

Date
**KEY PERSONNEL**

Qualifications and experience of key personnel proposed for administration and execution of the Contract.

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
<th>YEARS OF EXPERIENCE (GENERAL)</th>
<th>YEARS OF EXPERIENCE IN PROPOSED POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I certify that the above information is correct.

........................................  ...........................................  ...........................................
CONTRACTS COMPLETED IN THE LAST FIVE (5) YEARS

Work performed on works of a similar nature and volume over the last five years.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>NAME OF CLIENT</th>
<th>TYPE OF WORK AND YEAR OF COMPLETION</th>
<th>VALUE OF CONTRACT (KSHS.)</th>
</tr>
</thead>
</table>

I certify that the above works were successfully carried out and completed by ourselves.

……………………….                           …………………………..
………………
Title                      Signature                      Date

Jan 2021
SCHEDULE OF MAJOR ITEMS OF CONTRACTOR’S EQUIPMENT PROPOSED FOR CARRYING OUT THE WORKS

<table>
<thead>
<tr>
<th>ITEM OF EQUIPMENT</th>
<th>DESCRIPTION, MAKE AND AGE (Years)</th>
<th>CONDITION (New, good, poor) and number available</th>
<th>OWNED, LEASED (From whom?), or to be purchased (From whom?)</th>
</tr>
</thead>
</table>

I certify that the above works were successfully carried out and completed by ourselves.

…………………………                           ……………………………

Title                       Signature                      Date
NAME, ADDRESS AND TELEPHONE, TELEX AND FACSIMILE OF BANKS

(This should be for banks that may provide reference if contacted by the employer)

<table>
<thead>
<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>TELEPHONE</th>
<th>TELEX</th>
<th>FACSIMILE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I certify that the above works were successfully carried out and completed by ourselves.

.........................  .........................

...............  Signature  Date
**SCHEDULE OF ON-GOING PROJECTS**

Details of on-going or committed projects, including expected completion date.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>NAME OF CLIENT</th>
<th>CONTRACT SUM</th>
<th>% COMPLETE</th>
<th>COMPLETION DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I certify that the above works are currently being carried out by ourselves.

...............  .......................  ......................
Title  Signature  Date
FORM RB 1
REPUBLIC OF KENYA PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD APPLICATION
NO…………………………...OF…………………….20…

BETWEEN

……………………………………………….. APPLICANT AND

……………………………………………………..RESPONDENT (Procuring Entity)

Request for review of the decision of
the………………………………………………………………..

(Name of the Procuring Entity)
of……………………………………………………..dated

the…………………………day of…………………20…..in the matter of Tender

No…………………………………of………………………………20…………

…..

REQUEST FOR REVIEW I/We……………………………….,the above named Applicant(s), of address: Physical

address…………………………Fax No………………Tel.

No………………………………Email ………………………, hereby request the

Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds , namely:-

1.

2.

By this memorandum, the Applicant requests the Board for an order/orders that: -

1.

2.

SIGNED …………………………………………………………………

(Applicant)

Dated on………………..day of …………………………………/…20…

______________________________

FOR OFFICIAL USE ONLY

Lodged with the Secretary Public Procurement Administrative Review Board on
day of …………………………………/…20……

______________________________
Board Secretary

NON-DEBARMENT STATEMENT FORM

I/We/Messrs…………………………………………………………………………………………………………
of………………………………………..Street/Avenue,……………………………………………Building,
P.O. Box………………………………………Code…………………………of…………………. (Town),
……………………………………..(Nationality), Phone:……………………………………
E-mail……………………………………
declare that I/We /Messrs……………………………………………………………………………………………………are not
debarred from participating in public procurement by the Public Procurement Oversight
Authority pursuant to section 115 of the Public Procurement and Disposal Act, 2005.

Dated this ......................................day of .........................................
20..............................................

Authorized Signature…………………………………………..Official Stamp …………………

Name and Title of Authorized Signatory………………………………………………
DETAILS OF LITIGATIONS OR ARBITRATION PROCEEDINGS IN WHICH THE TENDERER IS INVOLVED AS ONE OF THE PARTIES

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

EVIDENCE OF FINANCIAL RESOURCES TO MEET QUALIFICATION REQUIREMENTS

(Cash in Hand, Lines of credit, e.t.c. List below and attach copies of supportive documents.)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
FINANCIAL REPORTS FOR THE LAST FIVE YEARS

(Balance sheets, Profits and Loss Statements, Auditor’s reports, etc. List below and attach copies)

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10.
ANTI-CORRUPTION DECLARATION COMMITMENT/PLEDGE
(Sections 62, 65 and 66 of the PPAD Act, 2015)

I/We/Messrs……………………………………………………………………………..Of Street, Building, P O Box…………………………………………………………………
……………………………………………………………………………………………… Contact/Phone/E mail……………………………………………………………………

Declare that Public Procurement is based on a free and fair competitive Tendering process which should not be open to abuse. I/We……………………………………………………
declare that I/We shall not offer or facilitate, directly or indirectly, any inducement or reward to any public officer, their relations or business associates, in connection with Tender/Tender No ………………………..…………………………………………….. for or in the subsequent performance of the contract if I/We am/are successful.

Authorized Signature……………………………………………………………………

Name and Title of Signatory………………………………………………………………